

حمل الآن

مجانا وحصريا

# امتحانات رقم (1)

## الترم الثاني



# Model Exam 1

Total mark

20



## Question 1

5

### (A) Write the scientific term :

It contains biotic factors and abiotic factors that interact with each other.

(.....)

### (B) Give reasons for :

1. Changing of water from one state to another.

2. Soil is very important for plants..

3. Hot air moves up, while cold air moves down.

4. A birman kitten has a long and silky hair.

## Question 2

5

### (A) Choose the correct answer :

Minerals are the building units of .....

a. air.

b. plants.

c. water.

d. rocks.

### (B) What happens to ...?

1. Arctic fox, if it has a black fur instead of a white fur.

2. The air temperature if there is no wind on Earth.

3. The soil if it doesn't contain any decomposer organisms.

4. The buildings when they are subjected to strong floods.

## Question 3

5

### (A) Choose from column (B) what suits it in column (A) :

| (A)                 | (B)                                  |
|---------------------|--------------------------------------|
| 1. Acacia tree      | a. it has sandy-colored scales.      |
| 2. Poison dart frog | b. it has thick white fur.           |
| 3. Emperor penguin  | c. it lives in Antarctic.            |
| 4. Arctic fox       | d. it lives in desert.               |
|                     | e. it lives in tropical rain forest. |

1. ....

2. ....

3. ....

4. ....

**(B) What is meant by (Define) :**

1. Atmospheric pressure : .....
2. Water cycle : .....
3. Adaptation : .....

**Question 4**

5

**(A) Complete the following sentences :**

1. Types of soil differ from each other in ..... and .....
2. Human activities cause the increase in ..... gas percentage and lead to the increase in Earth's .....

**(B) Mention :) :**

1. The factors that determine the wind direction.  
.....
2. The importance of barometer.  
.....
3. The reasons of desertification.  
.....

**Model Exam 2**

Total mark

20

**Question 1**

5

**(A) Complete the following sentence :**

Some plants like ..... and acacia trees live in the ..... environment in Egypt.

**(B) What is meant by (Define) :**

1. Soil : .....
2. Precipitation process: .....
3. Structural adaptation (physical adaptation) :  
.....
4. Meteorology : .....

**Question 2**

5

**(A) Choose the correct answer :**

All the following are considered as reasons of soil erosion, except .....

- a. increasing the amount of water.
- b. increasing the inclination of the land.
- c. increasing the planted areas.
- d. removing plants in an area.



**(B) What happens to ... ?**

1. The plants if the soil becomes unhealthy.

2. The living organisms in an ecosystem, if water and light are not available.

3. The water droplets in clouds when the air is cold enough.

4. The level of water in a lake when the rate of evaporation increases.

**Question 3**

5

**(A) Cross out the odd word :**

1. Lizards – Palms – Opuntia – Frog.

(.....)

2. Sunlight – Plants – Water – Soil.

(.....)

**(B) Mention :**

1. The role of gravity in water cycle in nature

2. The importance of anemometer.

3. Three examples of behavioral adaptation.

**Question 4**

5

**(A) Choose from column (B) what suits it in column (A) :**

| (A)              | (B)                                                                                                                 |
|------------------|---------------------------------------------------------------------------------------------------------------------|
| 1. Humus         | a. are from the inorganic components of the soil.                                                                   |
| 2. Air and water | b. help in recycling the nutrients from dead organisms back into the soil.                                          |
| 3. Decomposers   | c. is a material that makes the soil fertile and produced from decomposition of organic material of dead organisms. |
| 4. Erosion       | d. are the building units of rocks.                                                                                 |
|                  | e. is a process that helps in the formation of the soil.                                                            |

1. ....

2. ....

3. ....

4. ....



**(B) Give reasons for :**

1. Water can flow very fast through sand soil.

2. We put thermometer in weather balloon.

3. About 10% of water vapor in air comes from plants.

### Model Exam 3

Total mark

20

**Question 1**

5

**(A) Put (✓) or (X) :**

Chrysanthemum plant can produce flowers when the nights are longer than days.

( )

**(B) What happens to ... ?**

1. The water movements when boiling it in a pot.

2. Two similar plants, if they are exposed to the same intensity and duration of light.

3. The weather if the sun rays fall very inclined on an area.

4. The habitat when the number of predators decreases.

**Question 2**

5

**(A) Complete the following sentence :**

The remains of dead plants and animals are decomposed into chemical nutrients such as ....., nitrogen and .....

**(B) Mention one difference between :**

1. Weather radar and rain gauge.

2. Biotic factors and abiotic factors.

3. Sand soil, silt soil and clay soil.

4. Evaporation and collection.

### Question 3

5

#### (A) Choose the correct answer :

- Transferring of genetic factors happens in .....
  - humans only.
  - animals only.
  - humans and animals.
  - humans, animals and plants.
- Birds migrate to search for all of the following, except .....
  - best conditions for reproduction.
  - another unsuitable climate.
  - another suitable habitat.
  - different food resources.

#### (B) Give reasons for :

- Some plants that live in desert environment have long roots.
- Sandstorms have harmful effects on human health.
- Drying up of the large salt lake in Turkey in summer season.

### Question 4

5

#### (A) Cross out the odd phrase :

- Grey color – Medium size – Fast flowing of water – Retaining medium amount of water. (.....)
- Adding nutrients to the soil – Planting different types of crops – Converting fertile agricultural lands into cities. (.....)

#### (B) What is meant by (Define) :

- Convection : .....
- Drought : .....
- Humus : .....

## Model Exam 4

Total mark

20



### Question 1

5

#### (A) Choose the correct answer :

Abiotic factors in an ecosystem include .....

- a. animals and air.
- b. grasses and soil.
- c. living organisms.
- d. nonliving things.

#### (B) Give reasons for :

1. Formation of clouds in the sky.

2. Flooding is more dangerous if the ground is frozen.

3. Sphynx cat doesn't have long hair.

4. There are many types of soil.

### Question 2

5

#### (A) Complete the following sentence :

According to the size of particles in the soil, ..... are the biggest particles, while ..... are the smallest particles.

#### (B) What is meant by (Define) :

1. Water reservoirs : .....

2. Humidity : .....

3. Migration : .....

4. Pore spaces : .....

### Question 3

5

#### (A) Write the scientific term of each of the following :

1. It is a change in the behaviors or acts of a living organism to help it survive.

(.....)

2. It is a desert biome that has a cold climate all the year.

(.....)

#### (B) What happens to ...?

1. The snow when sunlight falls on it.



2. The solar panels when dust accumulates on them.

3. The plants in an ecosystem, if they receive too intense light.

#### Question 4

5

(A) Put (✓) or (X) :

1. Soil is considered as shelter to many different living organisms as insects. ( )
2. Clay soil can retain large amount of water. ( )

(B) Mention :

1. The tool that measures the wind speed.
2. How plants help in water cycle.
3. Three examples of some natural changes that cause habitat destruction.

### Model Exam 5

Total mark

20

#### Question 1

5

(A) Choose the correct answer :

All the following are inherited traits in humans, except .....

- a. eye color.      b. nose shape.      c. fur color.      d. ear shape.

(B) What happens to ... ?

1. The density of air if the cold air is warmed by the effect of solar energy.
2. The temperature of hot sand in a desert at night.
3. Arctic fox, if it has a thin fur instead of a thick fur.
4. The rocks if they are affected by the weathering process.

#### Question 2

5

(A) Cross out the odd phrase :

Dark color - Slow flowing of water - Small particles - Retaining small amount of water. (.....)

**(B) Give reasons for :**

1. Formation of fog in the early morning.

.....

2. Sometimes meteorologists could not predict the weather of next days.

.....

3. Most of desert plants have short extended roots near the Earth's surface.

.....

4. Decomposers have an important role in the formation of soil.

.....

**Question 3**

5

**(A) Correct the underlined words :**

1. Birds migration is considered a structural adaptation. (.....)

2. Biotic factors are nonliving things in an ecosystem such as air,  
land and water. (.....)

**(B) What is meant by (Define) :**

1. Condensation process : .....

2. Flood : .....

3. Ecosystem : .....

**Question 4**

5

**(A) Write the scientific term of each of the following :**

1. The building blocks of rocks. (.....)

2. Living organisms help in recycling nutrients from dead plants and animals back  
to the soil. (.....)

**(B) Mention :**

1. One importance of water.

.....

2. One harm caused by drought.

.....

3. One method to reduce the soil erosion.

.....



### Model Exam 1

- 1 (A) Ecosystem  
(B) 1. Due to gaining or losing of thermal energy.  
2. Because soil provides the plants with its basic needs for growth as it contains air, water and nutrients.  
3. Because the hot air has low density, while cold air has high density.  
4. Because it inherits this trait from its parents.
- 2 (A) d  
(B) 1. It can't hide in snow.  
2. The regions around the equator become extremely hot and the poles will completely freeze.  
3. The soil will lose the chemical nutrients that are found in dead plants and animals, so the soil will not be fertile.  
4. They may be damaged by moving or breaking them.
- 3 (A) 1. d    2. e    3. c    4. b  
(B) 1. It is the weight of the air above a certain area.  
2. It is the continuous movement of water among different water reservoirs.  
3. It is the process that helps living organisms to survive in the environment in which they live.
- 4 (A) 1. color - texture.  
2. carbon dioxide - temperature.  
(B) 1. • The amount of solar radiation that reaches Earth.  
• The rotation of Earth.  
2. It measures the atmospheric pressure.  
3. • Deforestation.  
• Overgrazing.  
• Drought.

### Model Exam 2

- 1 (A) Palms - desert  
(B) 1. It is the loose layer (delicate skin) which covers Earth's crust.  
2. It is the process in which water falls on Earth in the form of rain, sleet, snow or hail.  
3. It is the adaptation that is related to the body structure of a living organism to help it survive.  
4. It is the science of studying and predicting the weather.
- 2 (A) c  
(B) 1. The environment will change leading to death of plants that grow in this environment.  
2. Living organisms can't survive and will die.  
3. They change into ice crystals that fall to Earth's surface.  
4. The level of water will decrease.
- 3 (A) 1. Frog (All items are found in hot deserts, while frog doesn't live in hot deserts).  
2. Plants (All items are abiotic factors in an ecosystem, while plants are biotic factors).  
(B) 1. Water can be pulled downward by gravity force (precipitation).  
2. It measures the wind speed.  
3. • The growth of some plants toward light.  
• Living animals in a herd.  
• Migration.
- 4 (A) 1. c    2. a    3. b    4. e  
(B) 1. Because it has large amount of pore spaces between its particles.  
2. To measure temperature at different altitudes.  
3. Due to transpiration process which happens by plants.



## Model Exam 3

1 (A) (✓)

(B) 1. Hot water moves up and cold water falls down.

2. The two plants will grow with the same rate.
3. The weather of this area becomes very cold.
4. The number of preys increases greatly and this leads to the lack of resources in this habitat, so it causes habitat destruction.

**2** (A) carbon - oxygen.

(B) 1. • **Weather radar** : It detects the intensity and speed of precipitation and tracks thunderstorms and hurricanes.

- **Rain gauge** : It measures the amount of rain in a certain area.

2. ● **Biotic factors** : They are living organisms in an ecosystem such as humans, animals and plants.

- **Abiotic factors** : They are nonliving things in an ecosystem such as sunlight, air, water, soil, temperature and precipitation.

3. • **Sand soil** : Yellow color.

- **Silt soil** : Gray color.
- **Clay Soil** : Dark (black) color.

4. • **Evaporation** : It is the process in which matter changes from liquid state to gas state.

- **Collection** : It is the step in which rainwater falling on Earth's surface is collected in different water bodies.

**3** (A) 1. d 2. b

(B) 1. To get the deep groundwater.

2. Because sandstorms harm the human eyes and respiratory system.

3. Due to increase in the evaporation of the lake water.

**4** (A) 1. Fast flowing of water (All items are

properties of silt soil, while fast flowing of water is a property of sand soil).

2. Converting fertile agricultural lands into cities (All items help in soil restoration except converting fertile agricultural lands into cities).

(B) 1. It is the process in which heat transfers in liquids and gases, where hot molecules (less density) rise upward, while colder molecules (more density) fall down.

2. It is the shortage of water that is available for drinking, growing crops, farming animals and industry.

3. It is an organic material that is rich in nutrients produced from decomposition of dead organisms.

## Model Exam 4

1 (A) d

(B) 1. Due to condensation of water vapor into water droplets that attach to particles of dust or smoke in the air.

2. Because the ground cannot absorb the water.

3. Because it doesn't have the genetic factor for long hair.

4. Due to the different amounts of inorganic and organic ingredients that form them.

**2** (A) sand - clay

(B) 1. They are storage locations of water on Earth.

2. It is the measure of how much water vapor is present in the air.

3. It is considered a behavioral adaptation in which animals move from one place to another seasonally.
4. They are spaces among the particles of the soil filled with water or air.

- 3** (A) 1. Behavioral adaptation.  
2. Antarctic region (Antarctica).  
(B) 1. The snow will melt and change into liquid water.  
2. Solar panels stop generating energy.  
3. The too intense light may damage the plant's parts and cause their drying or burning.

- 4** (A) 1. (✓)                      2. (✓).  
(B) 1. Anemometer.  
2. The plants help in water cycle by transpiration process, where evaporation takes place through the stomata on the plant's leaves.  
3. - Hurricanes.              - Fires.  
- Floods.

### Model Exam 5

- 1** (A) c  
(B) 1. The density of the air will decrease (becomes low).  
2. The temperature of a desert sand will decrease.  
3. It can't keep its body warm at low temperatures.  
4. The rocks are broken down into small pieces such as particles of sand, silt and clay.

- 2** (A) Retaining small amount of water (All items are properties of clay soil, while retaining small amount of water is a property of sand soil).

- (B) 1. Due to condensation of water vapor that is found in the air.  
2. Due to unexpected quick changes in weather conditions.  
3. To absorb any available water and catch the smallest drops of dew.  
4. Because decomposers recycle the remains of dead plants and animals into chemical nutrients such as carbon, nitrogen and oxygen which are released into soil.

- 3** (A) 1. behavioral                      2. Abiotic  
(B) 1. It is the process in which matter changes from gas state to liquid state.  
2. It is the increase in the flow of water over the edges of riverbanks and onto the land around a river.  
3. It is an area that contains living organisms (biotic factors) and nonliving things (abiotic factors) that interact with each other.

- 4** (A) 1. Minerals.                      2. Decomposers.  
(B) 1. Humans, animals and plants need fresh water to survive.  
2. There is no enough water for people, plants and animals.  
3. Increasing the planted areas.



**1****Cairo Governorate****Nozha Educational Zone****1 (A) Choose the odd word :**

Deposition – Melting – Weathering – Erosion.

**(B) Write the scientific term :**

1. An environmental factor that affects plant growth and food formation. (.....)
2. The seasonal movement of animals from one place to another and considered a behavioral adaptation. (.....)
3. A process in which liquid is changed into gas by gaining energy. (.....)
4. The severe shortage of water available in an area. (.....)

**2 (A) Choose the correct answer :**

Desertification results from .....

- |                                        |                             |
|----------------------------------------|-----------------------------|
| a. horticulture.                       | b. over-cutting of forests. |
| c. allowing native plants to flourish. | d. gradual farming.         |

**(B) Correct the underlined words :**

1. Following a diet is one of the environmental factors that influence human growth. (.....)
2. The behavioral adaptation of the organism is related to its body structure. (.....)
3. Warm moist air is more denser. (.....)
4. The air particles density increases at the middle of the mountain. (.....)

**3 (A) Put (✓) or (X) :**

Sand particles in the soil are the largest sized particles. ( )

**(B) What happens :**

1. If the poison dart frog doesn't have big eyes.  
.....
2. When water gains high heat energy.  
.....
3. When the weather is dry for a long time.  
.....



**4 (A) Complete the following sentence :**

Decomposers break down the organic matter of dead organisms into components rich with nutrients called .....

**(B) Explain the scientific reason :**

1. Some plants have shallow, short roots.

.....

2. Water falls down into the ground.

.....

3. The dangerous of flooding increases if the land is frozen.

.....

**2****Cairo Governorate****Central Educational Zone****1 (A) Put (✓) or (X) :**

Hereditary traits don't play a role in the ability of living organisms to survive. ( )

**(B) 1. What happens when :** Cold water is placed on top of hot water.

.....

2. **Mention :** Importance of the anemometer.

.....

3. **Give a reason for :** Soil is very important for plants.

.....

4. **Write the scientific term :**

Traits that living organisms inherit from their parents. (.....)

**2 (A) Choose the correct answer :**

..... is/are considered from organic ingredients of soil.

a. Bacteria and fungi

b. Rocks

c. Air

d. Sand

**(B) 1. What happens when :** The sun rays fall perpendicular to a certain area.

.....

2. **Mention :** One of damages that caused by sandstorms.

.....

**3. Determine the type of adaptation (structural or behavioral) in this sentence:**

Thorns on the stems of some plants. (.....)

**4. Write the scientific term :**

Spaces between soil particles that are filled with water or air. (.....)

**3 (A) Put (✓) or (X) :**

1. Genetic factors helps dorcas gazelle withstand high temperature. ( )

2. The structural adaptations are that relate to the behavior of living organism. ( )

**(B) 1. Write the scientific term:**

The force that causes the falling of rain and snow on the Earth's surface. (.....)

2. **What happens to :** The water on Earth's surface when its temperature rises due to Sun.

.....

3. **What happens when:** Overusing of pesticides.

.....

**4 (A) Choose the correct answer :**

1. Humus is rich in .....

a. water. b. nutrients.

c. sand grains. d. oxygen.

2. Factors that cause breaking of rocks into small pieces are .....

a. moon and Sun. b. snow and fire.

c. rain and winds. d. lightening and thunder.

**(B) 1. Write the scientific term :**

The science of studying and predicting the weather. (.....)

2. **Mention:** How plants help in water cycle?

.....

3. **Give a reason:** Some plants that live in desert environment have long roots.

.....

**1 (A) Complete the following sentence using words in brackets :**

Scientists use ..... to manufacture building materials.

(topsoil – subsoil)

**(B) Mention one importance for each of the following :**

1. Anemometer: .....
2. Sunlight for plants: .....
3. Thermometer: .....
4. Genes: .....

**2 (A) Correct the underlined word :**

The process by which the land becomes infertile and turns into deserts is called weathering. (.....)

**(B) Write the scientific term :**

1. A process that plant's leaves get rid of excess water in the form of water vapor. (.....)
2. It is considered the main source of energy in the water cycle. (.....)
3. A place where living organisms live and their basic needs are provided. (.....)
4. A process through which the living organism be able to live and survive in its environment. (.....)

**3 (A) Put (✓) or (X) :**

1. Soil erosion makes the land more fertile and suitable for agriculture. ( )
2. Humidity represents the amount of water vapor in the air. ( )

**(B) Give reasons for :**

1. The weather in the area near the equator is hot.  
.....
2. Decomposers play an important role in the formation of soil.  
.....
3. The air falls downward when it loses heat.  
.....





(B) Write one example for the following :

1. Biotic factors.

.....

2. Inherited traits in animals.

.....

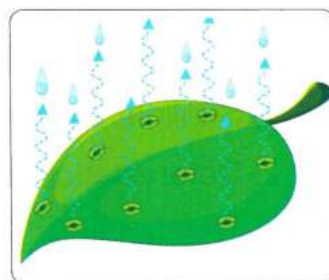
3. Organic ingredients.

.....

(C) Look at the opposite figure, then mention :

The name of the process

in the opposite leaf is .....



3 (A) Correct the underlined word :

Heat transfers from the Sun to Earth's surface by convection. (.....)

(B) What is the importance of :

1. Thermometer.

.....

2. Anemometer.

.....

(C) Compare between sand soil and clay soil according to the size of particles :

| Type of soil            | Sand soil      | Clay soil      |
|-------------------------|----------------|----------------|
| The size of particles : | .....<br>..... | .....<br>..... |

4 (A) Write the scientific term :

They are the building units of rocks. (.....)

(B) What happens when ...?

Sunlight falls on the snow.

.....

(C) Write two only from the basic needs of living organisms to survive :

1. ....

2. ....

**5****Giza Governorate****North Giza Educational Zone****1 (A) Complete the following :**

The overuse of ..... causes depletion of the soil.

**(B) Give reasons for :**

1. Sandstorms have harmful effects on human health. •

.....

2. About 10% of the water vapor in air comes from plants.

.....

3. Lizard body is covered with sandy-colored scales.

.....

4. Birds migrate from one place to another.

.....

**2 (A) Choose the correct answer :**

All the following are inherited traits in humans except the .....

a. eye color.

b. nose shape.

c. fur color.

d. ear shape.

**(B) What happens ...?**

1. When the dust accumulates on solar panels.

.....

2. To the atmospheric pressure as we move up toward the top of a mountain.

.....

3. To living organisms, if water and light are not available.

.....

4. To the soil that holds medium amount of water.

.....

**3 (A) Put (✓) or (X) :**

1. Sphynx cat doesn't have any hair or may have only very fine hair. ( )

2. Types of soil differ in their color and their ability to hold water. ( )

**(B) Mention the function of :**

1. Barometer : .....



2. Thermometer : .....

3. Decomposers : .....

**4 (A) Write the scientific term :**

1. It is the loose layer that covers the Earth's surface. (.....)

2. It contains biotic factors and abiotic factors that interact with each other. (.....)

**(B) Classify the following sentences into air current or wind :**

1. Vertical movement of air. (.....)

2. Horizontal movement of air. (.....)

**(C) Arrange the following according to the size of particles in an ascending order :**

(Sand soil – Clay soil – Silt soil)

1. .... 2. .... 3. ....

**6**

**Alexandria Governorate**

**East Educational Zone**

**1 (A) Complete the following :**

Air, water and rocks are nonliving components in the soil and they known as ..... ingredients.

**(B) Write the scientific term :**

1. The continuous movement of water among different water sources or reservoirs. (.....)

2. The amount of force that air exerted on its surroundings. (.....)

3. The component of soil which is rich in nutrients ingredient resulted from remains of dead organisms. (.....)

4. Structures in the living organism cell which transfer traits from parents to offspring. (.....)

**2 (A) Cross out the odd word :**

Tree – Human – Sunlight – Gazelle. (.....)

**(B) Mention :**

1. One difference between clay soil and sand soil. (water retains)

.....

2. The role of gravity in water cycle.

.....

3. One example for behavioral adaptation in animals.

.....

4. One use for the anemometer.

.....

### 3 (A) Put (✓) or (X) :

1. Hereditary traits are received from the cells of parents. ( )

2. We might have the ability to control the environmental factors. ( )

### (B) What happens to ...?

1. The weather if the sun rays fall very inclined on an area.

.....

2. The water droplets in clouds when they become bigger and heavier.

.....

3. The size of soil particles is large.

.....

### 4 (A) Choose the correct answer :

1. .... plant grows only when night is longer than day.

a. Tomato

b. Opuntia

c. Chrysanthemum

d. Palm

2. The soil with the medium sized particles is ..... soil.

a. sand

b. silt

c. clay

d. hard

### (B) Give reasons for :

1. Importance of humus for soil and plants.

.....

2. Hot air moves upward.

.....

3. Importance of condensation in the water cycle.

.....

7

## Alexandria Governorate

## El-Agami Educational Zone

## 1 (A) Choose the correct answer from the brackets :

Melting ice in an area can cause .....

(floods – earthquakes – sandstorms – drought)

## (B) State the function of each of the following :

1. Weather map : .....
2. White fur of the polar bear : .....
3. Large eyes of the poison dart frog : .....
4. Genes in living organisms : .....

## 2 (A) Cross out the odd word :

Temperature – Volcano – Humidity – Air pressure.

(.....)

## (B) Complete the following sentences :

1. Wind speed can be measured by using .....
2. .... are considered the basic building units of rocks.
3. The ..... is a loose layer which covers the Earth's crust.
4. The ..... occurs due to extremely increase in temperature and lack of water.

## 3 (A) Complete the following diagram that shows energy transfer in the water cycle :



## (B) What happens when ...?

1. Sun rays fall perpendicular on the equator.

.....

2. If there were no winds.

.....

3. Hot air moves upward above cold air.

.....

## 4 (A) Put (✓) or (X) :

1. It is impossible to grow any crops in desert environments. ( )
2. As the amount of organic matter increases soil fertility increases. ( )



**(B) In front of you picture of dorcas gazelle :**

1. Determine the environment where it lives :

.....

2. Mention two of its adaptations :

(1) .....

(2) .....

**8****Qalyoubia Governorate****Science Inspectorate****1 (A) Write the scientific term :**

It is a change in the behaviors of a living organism to help it survive.

(.....)

**(B) First : Give reasons for :**

1. About 10% of water vapor in air comes from plants.

.....

2. Desert plants have thick stems or leaves.

.....

**Second : What happens when ...?**

1. Air is heated.

.....

2. There is no decomposer in the soil (according to soil fertility).

.....

**2 (A) Put (✓) or (X) :**

The amount of light affects the growth of the plants.

( )

**(B) Complete the following sentences :**

1. The regions in which evaporation process is greatest are called .....

2. The air temperature at the bottom of mountain is ..... than that at the top.

3. The body size is from ..... factors that affects living organisms.

4. Air is from ..... ingredients of the soil.

3

1. Sphynx cat has .....

- a. very long hair.                      b. long and silky hair.  
c. no hair or very fine hair.        d. black feathers.

2. Clay soil has ..... flowing of water than sand soil.

- a. fast      b. slow      c. medium      d. very fast

(B) Mention (write) each of the following :

1. Example for process that occurs when matter loses energy : .....

2. Example for water reservoirs : .....

3. Example for animal has fatty layer and dense feather : .....

## 4

**(abiotic – runoff)**

1. .... is the step in which water flows along Earth' surface into rivers then into seas.

2. Sunlight and soil are examples for ..... factors.

(B) What is the function (importance) of :

1. Barometer : .....

2. Anemometer : .....

3. Thermometer : .....

## 9

## Menoufia Governorate

### Shebeen El-Koum Educational Zone

## 1

Plant growth is affected by ..... intensity.

(light – soil)

**(B) Give reasons for :**

1. The type of soil varies from one environment to another.

.....

2. The anemometer has a great importance.

3. The arctic fox has thick fur.

.....

4. The atmosphere at the equator is very hot.

.....

**2 (A) Put (✓) or (x) :**

Deforestation is from causes of desertification.

( )

**(B) Correct the underlined word :**

1. Birds migration is considered a structural adaptation. (.....)
2. During condensation process, energy gain occurs. (.....)
3. Rain guage is used in measuring temperature. (.....)
4. Sand soil can retain large amount of water. (.....)

**3 (A) Write the scientific term :**

1. The characteristics that living organisms inherit from their parents. (.....)
2. The loose layer which covers the Earth's crust. (.....)

**(B) What happens when ...?**

1. Water vapor in air condenses in the sky.
- .....

2. The gas is cooled and changed into a liquid.
- .....

3. Very strong wind blow, carrying sand and dust.
- .....

**4 (A) Choose the correct answer :**

1. .... is one of abiotic factors.  
 a. Plants                      b. Animals                      c. Air                              d. Human
2. The sand soil is characterized by ..... color.  
 a. gray                          b. red                              c. white                          d. yellow

**(B) Answer the following questions :**

1. The name of the opposite figure : .....
2. It is used in : .....



**(C) Mention one of natural factors that destroy habitat.**

.....



**1 (A) Complete the following :**

1. Mosquitoes and ..... live in bogs ecosystems.
2. The color of sand soil is .....

**(B) What happens ...?**

1. If water vapor in air condenses in the sky.  
.....

2. To the atmospheric pressure as we go to the top of a mountain.  
.....

3. To the rocks if they are affected by weathering process.  
.....

**2 (A) Correct the underlined word :**

Minerals are the building units of plants.

(.....)

**(B) Mention the importance of :**

1. Humus : .....
2. Soil for plants : .....
3. Thermometer : .....
4. Anemometer : .....

**3 (A) Choose the correct answer :**

All the following are biotic factors except .....

- a. insects.                      b. animals.                      c. air.                      d. grasses.

**(B) Give reasons for :**

1. Birds migrate from place to another.  
.....

2. Lizard has sandy-colored scales.  
.....

3. Decomposers are important for soil.  
.....

4. Clay soil retains more water.  
.....

**4 (A) Write the scientific term :**

1. Spaces among the soil particles. (.....)
2. Change in behaviors of living organisms to survive. (.....)

**(B) What's meant by :**

1. Evaporation process : .....
2. Meteorologist : .....
3. Ecosystem : .....

**11****Gharbia Governorate****El-Gharbia Educational Zone****1 (A) Put (✓) or (X) :**

The amount of light affects the growth of plant. ( )

**(B) Mention :**

1. The importance of barometer : .....
2. The two factors affecting the water cycle : .....
3. One example of abiotic factor : .....
4. One animal that lives in bogs : .....

**2 (A) Complete the following :**

When air is heated, its density will .....

**(B) What happens if ...?**

1. The air cools and water vapor condenses in the sky.  
.....
2. The rate of evaporation of water in a lake increases.  
.....
3. Humans build factories and homes on grassland.  
.....
4. Arctic fox has a black fur instead of white fur.  
.....

**3 (A) Write the scientific term :**

1. It contains biotic and abiotic factors that interact with each other. (.....)
2. The dark soil that can retain large amount of water. (.....)

**(B) Give reasons for :**

1. Feeling very hot at the equator.

.....

2. The amount of water on Earth's surface doesn't change.

.....

3. Importance of humus for soil and plants.

.....

**4 (A) Choose the correct answer :**

1. Which of the following is considered from biotic factors? .....

a. Light.

b. Water.

c. Animals.

2. From the genetic factors is .....

a. eye color.

b. smoking.

c. lack of health care.

**(B) Mention :**

1. The steps of studying of weather : .....

2. The importance of thermometer : .....

3. The types of soil : .....

**12 Kafr El-Sheikh Governorate****Desouk Educational Zone****1 (A) Choose the correct answer :**

Bacteria and fungi are ..... organisms.

a. consumer

b. producer

c. decomposer

**(B) What happens in the following cases :**

1. When water vapor rises into the air.

.....

2. Availability of water and sunlight for the plant.

.....

3. Placing cold water on top of hot water.

.....

4. Weathering and erosion processes do not occur.

.....

**2 (A) Put (✓) or (x) :**

Migration of birds from one place to another is a structural adaptation. ( )

**(B) Write the scientific term :**

1. All non-living factors in an ecosystem. (.....)



2. The amount of water vapor in the air. (.....)
3. Traits that can be passed from parents to offspring. (.....)
4. A device used to measure atmospheric pressure. (.....)

### 3 (A) Choose the correct answer :

1. .... is/are considered from the components of the soil.  
 a. Water                      b. Air                      c. Mineral                      d. All of the previous
2. .... has a circle of skin and no feather around its eyes.  
 a. Lizard                      b. Arctic fox                      c. African penguin                      d. Poison dart frog

### (B) Give reasons for :

1. The areas near the equator have high temperature.  
 .....

2. Some desert plants have long roots.  
 .....

3. Hot air moves up, while cold air moves down.  
 .....

### 4 (A) Complete the following sentences :

1. .... are the building units of rocks.
2. .... cat is characterized by being hairless or covered with very fine, soft hair.

### (B) State the importance of each of the following :

1. Thermometer : .....
2. Cell nucleus : .....
3. Anemometer : .....

## 13 Beheira Governorate

## Science Inspectorate

### 1 (A) Complete the following sentence :

The ..... are the basic building blocks of rocks.

### (B) What happens when :

1. Cold water is placed over hot water.  
 .....

2. Straw and animal manure are added to the soil.  
 .....

3. The atmospheric pressure, as we move up toward the top of a mountain.

.....

4. Chrysanthemum plant is exposed to sunlight during day longer than night.

.....

**2 (A) Choose the correct answer :**

The chrysanthemum plant grows best in the season of .....

- a. summer.                      b. spring.                      c. winter.                      d. fall.

**(B) Write the scientific term :**

- Natural changes that cause destruction of habitat and increase soil fertility. (.....)
- Poorly soil in flowing water with small-sized particles. (.....)
- A device used to track thunderstorms, hurricanes and rainfall speed. (.....)
- The movement of water between water bodies. (.....)

**3 (A) Put (✓) or (X) :**

- Removing plants protects the soil from erosion. (    )
- Water vapor gains energy during condensation. (    )

**(B) Give reasons for :**

- The body of a desert lizard is covered with scales of the color of sand.  
.....
- Bog soil retains water for a long time.  
.....
- Emperor penguin has thick blubber and its skin is covered with dense feathers.  
.....

**4 (A) Correct the underlined words :**

- Kittens are similar to their parents due to the transfer of environmental factors. (.....)
- The size of sand soil particles is medium. (.....)

**(B) Answer the following :**

- How can soil erosion be slowed down? (Give one method only).  
.....
- Mention one harm caused by sandstorms.  
.....
- Mention one use of rain gauge.  
.....

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Ismailia Governorate

Science Inspectorate

**1 (A) Put (✓) or (X) :**

The size of a living organism is one of the traits that is affected by genetic factors. ( )

**(B) Mention :**

1. One of the factors that leads to soil erosion.

.....

2. The importance of decomposers to the soil.

.....

3. Factors that affect the movement of water in water cycle.

.....

4. The device that is used to measure the temperature.

.....

**2 (A) Complete :**

From reasons of desertification are ..... and .....

**(B) Give reasons for :**

1. Emperor penguin has thick blubber and its body is covered with dense feathers.

.....

2. Formation of clouds in the sky.

.....

3. About 10% of water vapor in air comes from plants.

.....

4. Importance of humus for soil.

.....

**3 (A) Write the scientific term :**

1. Tiny structures that found in the cell's nucleus and carry the inherited traits. (.....)

2. They are living organisms in the ecosystem, such as plants and animals. (.....)

**(B) What happens ...?**

1. To the soil if the temperature in the environment increases.

.....

2. To the weather if the sun rays fall very inclined on an area.

.....

3. To living organisms if water and light are not available.

.....



#### 4 (A) Choose the correct answer :

- From animals that live in bogs is/are .....  
a. lions.                      b. gazelle.                      c. mosquitoes.                      d. zebra.
- From the behavioral adaptations is .....  
a. stem thorns in plants.                      b. thick fur.  
c. wide eyes in dart frog.                      d. bird migration.

#### (B) Compare between each of the following :

- | P.O.C.              | Sand soil | Clay soil |
|---------------------|-----------|-----------|
| Size of particles : | a. ....   | b. ....   |
- | P.O.C.       | Rain gauge | Anemometer |
|--------------|------------|------------|
| Importance : | a. ....    | b. ....    |
- | P.O.C.                 | At the top of mountain | At the bottom of mountain |
|------------------------|------------------------|---------------------------|
| Atmospheric pressure : | a. ....                | b. ....                   |

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Suez Governorate

North Educational Zone

#### 1 (A) Cross out the odd word :

Human – Air – Plants – Animals. (.....)

#### (B) Write the scientific term :

- It is the process in which water falls on Earth in the form of rain, sleet or hail. (.....)
- It is the weight of the air above a certain area. (.....)
- It is a change in the body structure of living organisms that helps them to survive. (.....)
- It is the loose layer which covers Earth's crust. (.....)

#### 2 (A) Choose the correct answer :

All the following are inherited traits in humans, except .....

- a. eye color.                      b. nose.                      c. fur color.                      d. ear shape.

#### (B) Complete the following sentences :

- Water vapor condenses in the sky to form .....

2. Heavy rain for a long period of time may cause .....
3. .... is abiotic factor in an ecosystem.
4. .... soil has a gray color.

**3 (A) Put (✓) or (X) :**

1. Genes carry inherited traits from parents to their offspring. ( )
2. Overuse of pesticides is a way of soil restoration. ( )

**(B) Correct the underlined words :**

1. Deserts are formed by the effect of moist air. (.....)
2. Barometer is used to measure the temperature. (.....)
3. Floods are from human activities that cause habitat destruction. (.....)

**4 (A) Complete the following sentences using the words below :**

**(short – rocks – long)**

1. Some plants in hot deserts have ..... roots to get the deep groundwater.
2. Minerals are the building units of .....

**(B) What happens ...?**

1. If water of seas gains big amount of thermal energy.  
.....
2. To the air density, as we move down toward the bottom of a mountain.  
.....
3. If African penguin has dense feathers around each of its eyes.  
.....

**16**

**Port Said Governorate**

**Science Inspectorate**

**1 (A) Complete the following statement :**

The water level of a lake decreases as a result of .....

**(B) Give reasons for :**

1. Ice crystals and water droplets in clouds fall back again to Earth.  
.....
2. The regions near the two poles are very cold.  
.....
3. Some plants have long roots.  
.....
4. Farmers use animal manure to restore the soil.  
.....

**2 (A) Write the scientific term :**

The spaces between soil particles that filled with air or water. (.....)

**(B) What happens ...?**

1. When the evaporation of water in the lake increases.

.....

2. When the weather is dry for a long time.

.....

3. If the poison dart frog doesn't have big eyes.

.....

4. When heavy rain falls down on the soil. (In terms of nutrients).

.....

**3 (A) Put (✓) or (X) :**

1. The color of the fur is considered a structural adaptation. ( )

2. The large particles in the soil make it more retain of water. ( )

**(B) Determine :**

1. A process that plants get rid of exceeds water in form of water vapor.

.....

2. The process that occurs when the water droplets which forming clouds become heavier and fall down by gravity.

.....

3. A process in which a living organism is able to live in a way that enables it to survive.

.....

**4 (A) Choose the correct answer :**

1. Which of the following is not considered from the abiotic factors? .....

a. Light.

b. Water.

c. Temperature.

d. Plant.

2. From the behavioral adaptations is .....

a. thick skin.

b. fur.

c. long ears.

d. bird migration.



**(B) Mention the name of the following :**

1 . Strong winds carry sand and dust blow up from an extremely dry area.

.....

2. Water flows over the edge of the riverbank and onto the land.

.....

3. They are living organisms in the ecosystem, such as plants and animals.

.....

**17****Minia Governorate****Science Inspectorate****1 (A) Put (✓) or (X) :**

Water flows through sand soil faster than in clay soil. ( )

**(B) Write the scientific term :**

1. They are building units of rocks. (.....)
2. It is the measure of how much water vapor is present in air. (.....)
3. It is a type of evaporation that takes place through the stomata. (.....)
4. It is an area that contains living organisms and non-living things that interact with each other. (.....)

**2 (A) Cross out the odd word :**

Lizards – Palms – Opuntia – Frog. (.....)

**(B) Correct the underlined words :**

1. Rain gauge is used in measuring the wind speed. (.....)
2. Liquid water gains electrical energy when it changes into water vapor. (.....)
3. Biotic factors are non-living things in an ecosystem such as air, land and water. (.....)
4. The living organisms that feed on the remains of dead animals and plants are known as producers. (.....)

**3 (A) Choose the correct answer :**

1. The white fur of a polar bear that allows it to live in extremely cold regions is considered ..... adaptation.  
 a. structural                      b. behavioral                      c. mechanical                      d. chemical
2. One of the reasons of desertification is .....  
 a. adding natural fertilizers.                      b. overgrazing.  
 c. planting different crops.                      d. photosynthesis process.

(B) Give reasons for :

- 1 . Total amount of water on Earth does not change.  
.....
- 2. Hot air moves up, while cold air moves down.  
.....
- 3. Lizard body is covered with sandy-colored scales.  
.....

4 (A) Complete the table by using the words below :  
(small – yellow – medium – large – dark)

| Points of comparison | Sand soil | Clay soil |
|----------------------|-----------|-----------|
| Color :              | .....     | .....     |
| Retaining water :    | .....     | .....     |

(B) What happens ...?

- 1. If arctic fox has a thin fur instead of a thick fur.  
.....
- 2. To the atmospheric pressure, as we move up toward the top of a mountain.  
.....
- 3. If water vapor in air condenses in the sky.  
.....

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Sohag Governorate

Science Inspectorate

1 (A) Complete the following sentence :

The thorns on the stem of some plants are considered ..... adaptation.

(B) First : Give reasons for :

- 1. Water falls down into the ground.  
.....
- 2. When hot air loses its heat, it descends.  
.....

Second : Identify the type of factor : (Genetic – Environmental – Lifestyle)

- 1. Smoking. (.....)
- 2. Availability of hospitals. (.....)

**2 (A) Choose the correct answer :**

Swamps are characterized by being .....

- a. dry.                      b. wet.                      c. sandy and loose.                      d. extremely hot.

**(B) First : Write the scientific name :**

1. The weight of the air above a location. (.....)
2. Living organisms help in recycling nutrients from dead plants and animals back to the soil. (.....)

**Second : What happens ...?**

1. When the ice melts suddenly.
- .....

2. If the poison dart frog doesn't have big eyes.
- .....

**3 (A) Put (✓) or (X) :**

- 1 . Frogs are considered the most common animals living in desert soil. ( )
- 2 . The size of the organism's natural habitat does not affect its growth. ( )

**(B) First : Compare between : Sand soil and clay soil in term of water retention.**

| Point of comparison | Sand soil | Clay soil |
|---------------------|-----------|-----------|
| Water retention :   | .....     | .....     |

**Second : Mention :**

1. The importance of weather balloon.
- .....

2. One effect of drought.
- .....

**4 (A) Correct the underlined words :**

1. The unhealthy environment positively affect human life. (.....)
2. Humus decrease soil fertility. (.....)

**(B) Answer the following :**

- 1 . How does the amount of solar energy affect the transpiration rate of plant's leaves?
- .....

2. What are the steps of studying weather?
- .....

3. Why are farmers use animal manure to restore the soil?
- .....



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Qena Governorate

Science Inspectorate

**1 (A) Choose the correct answer :**All the following are biotic factors except .....

- a. insects.                      b. birds.                      c. soil.                      d. grasses.

**(B) What is the function of :**

1. Anemometer : .....
2. Barometer : .....
3. Genes : .....
4. Decomposers : .....

**2 (A) Put (✓) or (x) :**

Sand soil has small-sized particles. (     )

**(B) What happens to ...?**

- 1 . The atmospheric pressure as we move up.  
.....
2. The plants, if they receive too intense light.  
.....
3. The air movement, when it is heated.  
.....
4. Birman cats, if they have the genetic factors of hairless body.  
.....

**3 (A) Correct the underlined words :**

1. The minerals are the building blocks of plants. (.....)
2. Water flows through clay soil faster than silt soil. (.....)

**(B) Mention one example of the following :**

- 1 . A negative effect of sandstorms.  
.....
2. A behavioral adaptation in animals.  
.....
3. A factor that determines wind direction.  
.....

**4 (A) Cross out the odd word :**

1. Sunlight – Water – Plant – Air. (.....)
2. Lizards – Palms – Opuntia – Frog. (.....)

**(B) Give reasons for the following :**

- 1 . Changing of water from one state to another state.

.....

2. Lizards have sandy-colored scales.

.....

3. Formation of fog in the early morning.

.....

**20****Luxor Governorate****Esna Educational Zone****1 (A) Choose the correct answer :**

1. When the soil contains large amount of sand particles, the flow of water will .....

a. not change.      b. increase.      c. decrease.      d. stop.

2. All the following are biotic factors, except .....

a. animals.      b. insects.      c. precipitation.      d. grasses.

**(B) Give reasons for :**

1. There are many types of soil.

.....

2. Formation of clouds in the sky.

.....

3. African penguin has a circle of skin that doesn't have any feather around each of its eyes.

.....

**2 (A) Put (✓) or (X) :**

1. Changing the habitat can cause extinction of some living organisms. ( )
2. Savannas are grassland ecosystems that contain dry sand soil. ( )

**(B) What happens ...?**

1. If the soil doesn't contain any decomposer organisms.

.....

2. To the air density as we move down toward the bottom of a mountain.

.....

3. If the sunlight falls on the snow.

.....

### 3 (A) Write the scientific term :

They are living organisms in an ecosystem such as human, plant and animals. (.....)

### (B) Compare between the types of soil :

| P.O.C.             | Sand soil | Silt soil | Clay soil |
|--------------------|-----------|-----------|-----------|
| Size of particles: | .....     | .....     | .....     |
| Retaining water:   | .....     | .....     | .....     |

### 4 (A) Complete the following :

Some desert plants have thick ..... to store .....

### (B) Mention the importance of each of the following :

1. Rain gauge : .....
2. Long roots : .....
3. Humus : .....
4. Barometer : .....



## Cairo Governorate

### 1 Nozha Educational Zone

- 1 (A) Melting (All items are the processes that help in soil formation, while melting isn't).  
(B) 1. Availability of light and water.  
2. Migration.  
3. Evaporation process.  
4. Drought.

- 2 (A) b  
(B) 1. lifestyle choices  
2. structural  
3. less 4. bottom

- 3 (A) (✓)  
(B) 1. It can't see at night.  
2. It changes from liquid state to gas state.  
3. Drought occurs.

- 4 (A) humus.  
(B) 1. To absorb any available water, and catch the smallest drops of dew.  
2. Due to gravity force.  
3. Because the ground cannot absorb the water.

### 2 Central Educational Zone

- 1 (A) (✗)  
(B) 1. The hot water molecules (less density) rise upward, while the colder water molecules (more density) fall down by the help of gravity force.

2. It measures the wind speed.  
3. Because soil provides the plant with its basic needs for growth as it contains air, water and nutrients.  
4. Hereditary traits.

- 2 (A) a  
(B) 1. The sun rays are concentrated on a small area giving high effect of heat, so the weather is hot.  
2. It reduces the visibility during driving cars.  
3. Structural adaptation.  
4. Pore spaces (pores).

- 3 (A) 1. (✓) 2. (✗)  
(B) 1. Gravity force.  
2. This leads to evaporation of water and changing it into water vapor due to gaining thermal energy.  
3. Soil depletion occurs.

- 4 (A) 1. b 2. c  
(B) 1. Meteorology.  
2. The plants help in water cycle by transpiration process, where evaporation takes place through the stomata on the plant's leaves.  
3. To get the deep groundwater.

## 3 New Cairo Educational Zone

- 1 (A) subsoil  
 (B) 1. It measures the wind speed.  
 2. It affects the growth of plants as they make photosynthesis process.  
 3. It measures the temperature.  
 4. They carry inherited traits from parents to offspring, so they are responsible for determining the body features.

- 2 (A) desertification.  
 (B) 1. Transpiration.  
 2. Solar energy.  
 3. Habitat.  
 4. Adaptation.

- 3 (A) 1. (✗) 2. (✓)  
 (B) 1. Because the sun rays fall perpendicular on Earth's surface giving high effect of heat.  
 2. Because decomposers recycle the remains of dead plants and animals into chemical nutrients such as carbon, nitrogen and oxygen which are released into soil.  
 3. Because cold air has more density, so it falls downward.

- 4 (A) 1. c 2. a  
 (B) 1. Insects (All items are abiotic factors, while insects are biotic factors).  
 2. Volcanoes (All items are from human activities that lead to habitat destruction, while volcanoes are from natural changes).  
 3. Type of food (All items are from genetic factors, while type of food is an environmental factor).

## Giza Governorate

4 6<sup>th</sup> of October Educational Zone

- 1 (A) (✓)  
 (B) 1. To get the deep groundwater.  
 2. Due to condensation of water vapor into water droplets that attach to particles of dust or smoke in the air.  
 (C) 1. Behavioral adaptation.  
 2. Structural adaptation.

- 2 (A) a  
 (B) 1. Animals.  
 2. The eye color.  
 3. Remains of dead plants and animals.  
 (C) transpiration.

- 3 (A) radiation.  
 (B) 1. It measures the temperature.  
 2. It measures the wind speed.

(C)

| Type of soil            | Sand soil | Clay soil |
|-------------------------|-----------|-----------|
| The size of particles : | Large     | Small     |

- 4 (A) Minerals.  
 (B) The snow will melt and change into liquid water.  
 (C) 1. Food. 2. Water.

### 5 North Giza Educational Zone

- 1 (A) pesticides  
 (B) 1. Because sandstorms harm the human eyes and respiratory system.  
 2. Due to transpiration process which happens by plants.  
 3. To protect it from high temperatures of weather and hide among the rocks in desert.  
 4. To search for :  
 - The best conditions that help them reproduce and preserve their species.  
 - Different food resources.  
 - Suitable new habitats.

- 2 (A) c  
 (B) 1. Solar panels stop generating energy.  
 2. The atmospheric pressure will decrease.  
 3. Living organisms can't survive and will die.  
 4. The soil keeps its organic materials, so it becomes more fertile.

- 3 (A) 1. (✓) 2. (✓)  
 (B) 1. It measures the atmospheric pressure.  
 2. It measures the temperature.  
 3. - They clean the environment by decomposing the dead organisms.  
 - They return back nutrients into the ecosystem again.

- 4 (A) 1. Soil. 2. Ecosystem.  
 (B) 1. Air current. 2. Wind.  
 (C) 1. Clay soil.  
 2. Silt soil.  
 3. Sand soil.

### Alexandria Governorate

### 6 East Educational Zone

- 1 (A) Inorganic  
 (B) 1. Water cycle.  
 2. Atmospheric pressure.  
 3. Humus.  
 4. Genes.
- 2 (A) Sunlight (All items are biotic factors in an ecosystem, while sunlight is an abiotic factor).  
 (B) 1. Clay soil : retaining water is large.  
 Sand soil : retaining water is small.  
 2. Water can be pulled downward by gravity force (precipitation).



### PART 3

3. Migration.
4. It measures the wind speed.

- 3 (A) 1. (✓)                      2. (✗)  
(B) 1. The weather of this area becomes very cold.  
2. They are fall down to Earth's surface due to gravity.  
3. Sand soil allows water to flow fast through it so, it can hold small amount of water.

- 4 (A) 1. c                      2. b  
(B) 1. Because humus increases the soil fertility and helps plants to grow.  
2. Because hot air has less density, so it moves upward.  
3. Because clouds are formed due to condensation of water vapor in the air.

#### 7 El-Agami Educational Zone

- 1 (A) floods.  
(B) 1. It allows meteorologists to :  
- See the important weather conditions.  
- Communicate information to other meteorologists and the public.

2. To hide from its enemies.
3. To help it see at night.
4. They carry inherited traits from parents to offspring, so they are responsible for determining the body features.

- 2 (A) Volcano (All items are weather conditions except volcano).  
(B) 1. anemometer.  
2. Minerals  
3. soil  
4. drought

- 3 (A) 1. Gaining                      2. Losing  
3. Gaining                      4. Losing  
(B) 1. The sun rays are concentrated on a small area giving high effect of heat, so the weather is hot.  
2. - The regions around the equator become extremely hot and the poles will completely freeze.  
- Some ecosystems will change completely.  
- Some ecosystems may disappear completely.  
3. Due to the effect of convection, where hot air has less density, so it rises upward, while cold air has more density, so it falls down.

- 4 (A) 1. (✗)                      2. (✓)  
(B) 1. Desert and semidesert of Egypt and the Middle East.

2. (1) Its body color that helps it hide in the desert.  
(2) It doesn't drink water for several months.

**Qalyoubia Governorate**

**8 Science Inspectorate**

- 1** (A) Behavioral adaptation.  
(B) First : 1. Due to transpiration process which happens by plants.  
2. To store water.  
Second : 1. It expands and its molecules spread out away from each other, so the hot air becomes less dense and moves up.  
2. The soil will lose the chemical nutrients that are found in dead plants and animals and the soil will not be fertile.

- 2** (A) (✓)  
(B) 1. hottest regions.  
2. higher 3. genetic  
4. inorganic

- 3** (A) 1. c 2. b  
(B) 1. Condensation process.  
2. Lakes.  
3. Emperor penguin.

- 4** (A) 1. Runoff 2. abiotic  
(B) 1. It measures the atmospheric pressure.  
2. It measures the wind speed.  
3. It measures the temperature.

**Menoufia Governorate**

**9 Shebeen El-Koum Educational Zone**

- 1** (A) light  
(B) 1. Due to the effect of climate and types of rocks found in this soil.  
2. Because it measures the wind speed.  
3. To keep its body warm at low temperatures of weather.  
4. Because the sun rays fall perpendicular on Earth's surface giving high effect of heat.

- 2** (A) (✓)  
(B) 1. behavioral  
2. lose  
3. Thermometer  
4. Clay

- 3** (A) 1. Hereditary traits.  
2. Soil.  
(B) 1. Clouds are formed in the sky.  
2. Condensation process occurs.  
3. Sandstorm occurs.





- 3** (A) 1. Ecosystem. 2. Clay soil.  
 (B) 1. Because the sun rays fall perpendicular on Earth's surface giving high effect of heat.  
 2. Because it can be replaced (recycled) through the water cycle.  
 3. Because humus increases the soil fertility and helps plants to grow.

- 4** (A) 1. c 2. a  
 (B) 1. Collecting data, analyzing the data and putting it all together.  
 2. It measures the temperature.  
 3. Sand soil, silt soil and clay soil.

**Kafr El-Sheikh Governorate**

**12 Desouk Educational Zone**

- 1** (A) c  
 (B) 1. It cools and condenses into water droplets in the form of clouds.  
 2. They affect the growth of plants as they make photosynthesis process.  
 3. The hot water molecules (less density) rise upward, while the cold water molecules (more density) fall down by the help of gravity.  
 4. The soil can't be formed.

- 2** (A) (✕)  
 (B) 1. Abiotic factors.  
 2. Humidity.  
 3. Hereditary traits.  
 4. Barometer.

- 3** (A) 1. d 2. c  
 (B) 1. Because the sun rays fall perpendicular on Earth's surface giving high effect of heat.  
 2. To get the deep groundwater.  
 3. Because the hot air has low density, while the cold air has high density.

- 4** (A) 1. Minerals 2. Sphynx  
 (B) 1. It measures the temperature.  
 2. It contains genes which carry inherited traits from parents to offspring, so they are responsible for determining the body features.  
 3. It measures the wind speed.

**Beheira Governorate**

**13 Science Inspectorate**

- 1** (A) minerals  
 (B) 1. The hot water molecules (less density) rise upward, while the cold water molecules (more density) fall down by the help of gravity.

2. The soil will be restored.
3. The atmospheric pressure will decrease.
4. It can't grow and can't produce flowers.

2 (A) c

- (B) 1. Volcanic eruptions.  
 2. Clay soil.  
 3. Weather radar.  
 4. Water cycle.

3 (A) 1. (✗) 2. (✗)

- (B) 1. To protect it from high temperature of weather and hide among the rocks in desert.  
 2. Because it contains clay soil that retains much water very well.  
 3. To keep its body warm and protect its body from freezing at low temperatures of weather.

4 (A) 1. genetic 2. large.

- (B) 1. Increasing the planted areas.  
 2. It harms the human eyes and respiratory system.  
 3. It measures the amount of rain in a certain area.

Ismailia Governorate

14 Science Inspectorate

1 (A) (✓)

- (B) 1. Removing plants.

2. - They clean the environment by decomposing the dead organisms.  
 - They return back nutrients into the ecosystem again.
3. Solar energy and gravity force.
4. Thermometer.

2 (A) deforestation – drought.

- (B) 1. To keep its body warm and protect its body from freezing at low temperatures of weather.  
 2. Due to condensation of water vapor into water droplets that attach to particles of dust or smoke in the air.  
 3. Due to transpiration process which happens by plants.  
 4. Because it increases the soil fertility.

3 (A) 1. Genes.

2. Biotic factors.  
 (B) 1. The soil will dry and may lose its nutrients.  
 2. The weather of this area becomes very cold.  
 3. Living organisms can't survive and will die.

- 4 (A) 1. c 2. d  
 (B) 1. a. Large. b. Small.  
 2. a. It measures the amount of rain in a certain area.  
 b. It measures the wind speed.  
 3. a. Low. b. High.

### Suez Governorate

### 15 North Educational Zone

- 1 (A) Air (All items are biotic factors in an ecosystem, while air is an abiotic factor).  
 (B) 1. Precipitation process.  
 2. Atmospheric pressure.  
 3. Structural adaptation.  
 4. Soil.

- 2 (A) c  
 (B) 1. clouds. 2. flood.  
 3. Sunlight 4. Silt

- 3 (A) 1. (✓) 2. (✗)  
 (B) 1. dry  
 2. Thermometer  
 3. natural changes

- 4 (A) 1. long 2. rocks.  
 (B) 1. water of seas changes into water vapor in air.  
 2. The air density increases.  
 3. Its body doesn't cool fast at high temperatures.

### Port Said Governorate

### 16 Science Inspectorate

- 1 (A) evaporation process.  
 (B) 1. Due to gravity force.  
 2. Because the sun rays fall very inclined giving the lowest effect of heat.  
 3. To get the deep groundwater.  
 4. To add nutrients to the soil, so the soil can be restored.

- 2 (A) Pore spaces (pores).  
 (B) 1. The lake is dried up and disappeared.  
 2. Drought occurs.  
 3. It can't see at night.  
 4. This may lead to wash down the nutrients of the soil.

- 3 (A) 1. (✓) 2. (✗)  
 (B) 1. Transpiration process.  
 2. Precipitation process.  
 3. Adaptation.

- 4 (A) 1. d 2. d  
 (B) 1. Sandstorm.  
 2. Flood.  
 3. Biotic factors.



**Minia Governorate**

**17 Science Inspectorate**

- 1 (A) (✓)  
 (B) 1. Minerals. 2. Humidity.  
 3. Transpiration.  
 4. Ecosystem.

- 2 (A) Frog (All items are found in hot deserts, while frog doesn't live in hot deserts).  
 (B) 1. Anemometer  
 2. thermal  
 3. Abiotic  
 4. decomposers.

- 3 (A) 1. a 2. b  
 (B) 1. Because it can be replaced (recycled) through the water cycle.  
 2. Due to the effect of convection, where hot air has less density, so it rises upward, while cold air has more density, so it falls down.  
 3. To hide among rocks in desert.

- 4 (A)

| Points of comparison | Sand soil | Clay soil |
|----------------------|-----------|-----------|
| Color :              | Yellow    | Dark      |
| Retaining water :    | Small     | Large     |

- (B) 1. It can't keep its body warm at low temperatures.  
 2. The atmospheric pressure will decrease.  
 3. Clouds are formed in the sky.

**Sohag Governorate**

**18 Science Inspectorate**

- 1 (A) structural  
 (B) First : 1. Due to the gravity force.  
 2. Due to the effect of convection, where cold air has high density, so it descends.  
 Second : 1. Lifestyle.  
 2. Environmental.

- 2 (A) b  
 (B) First : 1. Atmospheric pressure.  
 2. Decomposers.  
 Second : 1. It changes from solid state into liquid state.  
 2. It can't see at night.

- 3 (A) 1. (✗) 2. (✗)  
 (B) First :

| Point of comparison | Sand soil | Clay soil |
|---------------------|-----------|-----------|
| Water retention :   | Small     | Large     |

- Second :  
 1. It measures conditions of weather from different altitudes.  
 2. There is not enough water for people, plants and animals.

- 4 (A) 1. negatively 2. increase  
 (B) 1. When the amount of solar energy increases, the transpiration rate of plant's leaves increases.  
 2. Collecting data, analyzing data and putting it all together.  
 3. To add nutrients to the soil.

**Qena Governorate**

**19 Science Inspectorate**

- 1 (A) c  
 (B) 1. It measures the wind speed.  
 2. It measures the atmospheric pressure.  
 3. They carry inherited traits from parents to offspring, so they are responsible for determining the body features.  
 4. - They clean the environment by decomposing the dead organisms.  
 - They return back nutrients into the ecosystem again.

- 2 (A) (x)  
 (B) 1. The atmospheric pressure will decrease.  
 2. The too intense light may damage the plant's parts and cause their drying or burning.

3. It moves upward.  
 4. The trait of hairless body appears on the offspring.

- 3 (A) 1. rocks. 2. sand  
 (B) 1. Dust harms the human eyes and respiratory system.  
 2. Migration.  
 3. The amount of solar radiation that reaches Earth.

- 4 (A) 1. Plant (All items are abiotic factors in an ecosystem, while plant is a biotic factor).  
 2. Frog (All items are found in hot deserts, while frog doesn't live in hot deserts).  
 (B) 1. Due to gaining or losing of thermal energy.  
 2. To hide among rocks in desert.  
 3. Due to condensation of water vapor that is found in the air.

**Luxor Governorate**

**20 Esna Educational Zone**

- 1 (A) 1. b 2. c  
 (B) 1. Due to the different amounts of ingredients that form them.

2. Due to condensation of water vapor into water droplets that attach to particles of dust or smoke in the air.
3. To help its body cool fast in hot climate.

2 (A) 1. (✓)                      2. (✓)

- (B) 1. The soil will lose the chemical nutrients that are found in dead plants and animals and the soil will not be fertile.
2. The air density will increase.
3. The snow will melt and change into liquid water.

3 (A) Biotic factors.

(B)

| P.O.C.              | Sand soil | Silt soil | Clay soil |
|---------------------|-----------|-----------|-----------|
| Size of particles : | Large     | Medium    | Small     |
| Retaining water :   | Small     | Medium    | Large     |

4 (A) leaves – water.

- (B) 1. It measures the amount of rain in a certain area.
2. They get the deep groundwater.
3. It increases the soil fertility and helps plants to grow.
4. It measures the atmospheric pressure.

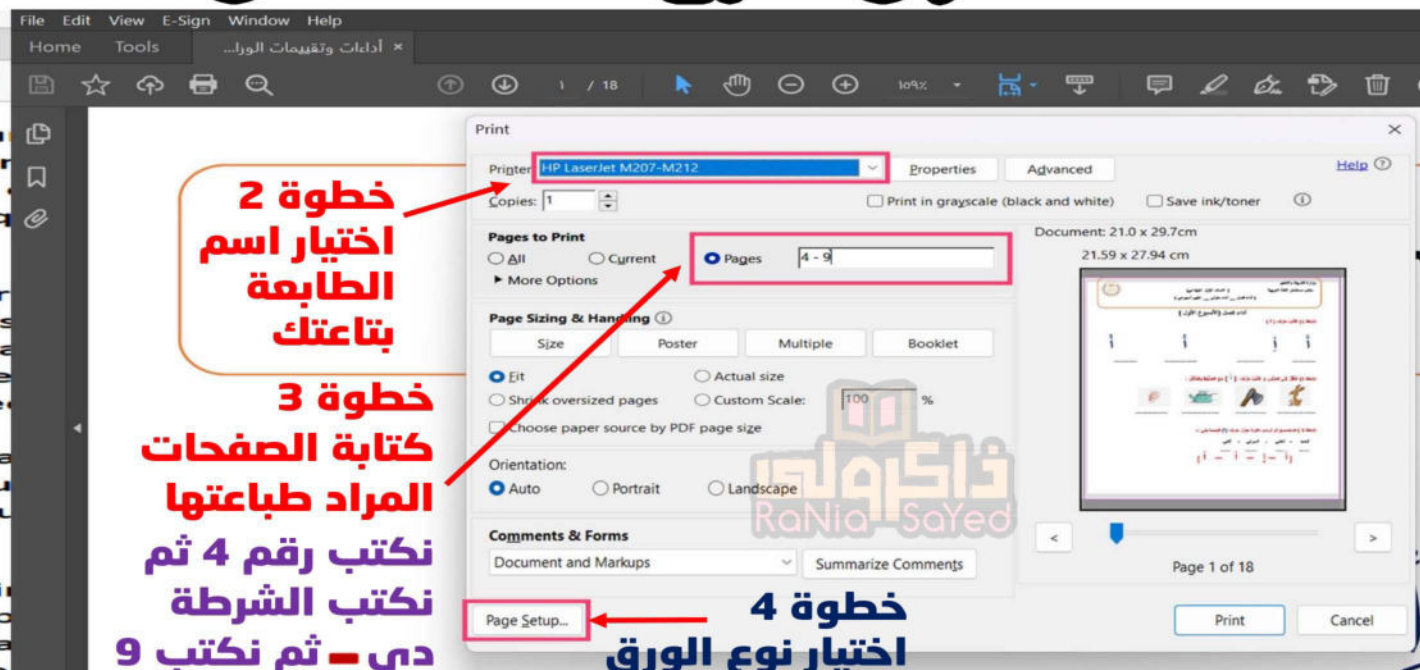


# كيفية طباعة صفحات معينة من ملف معين

## مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



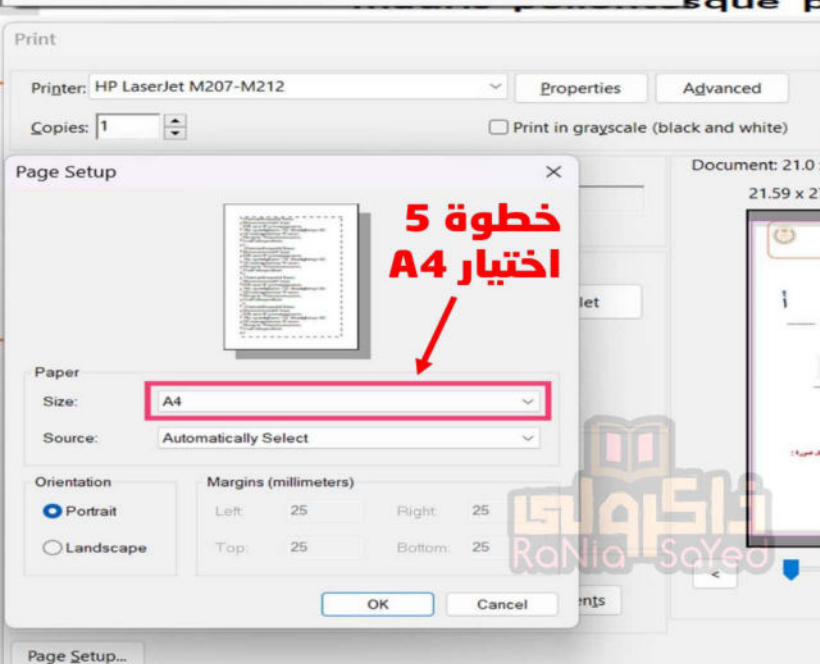
خطوة 1



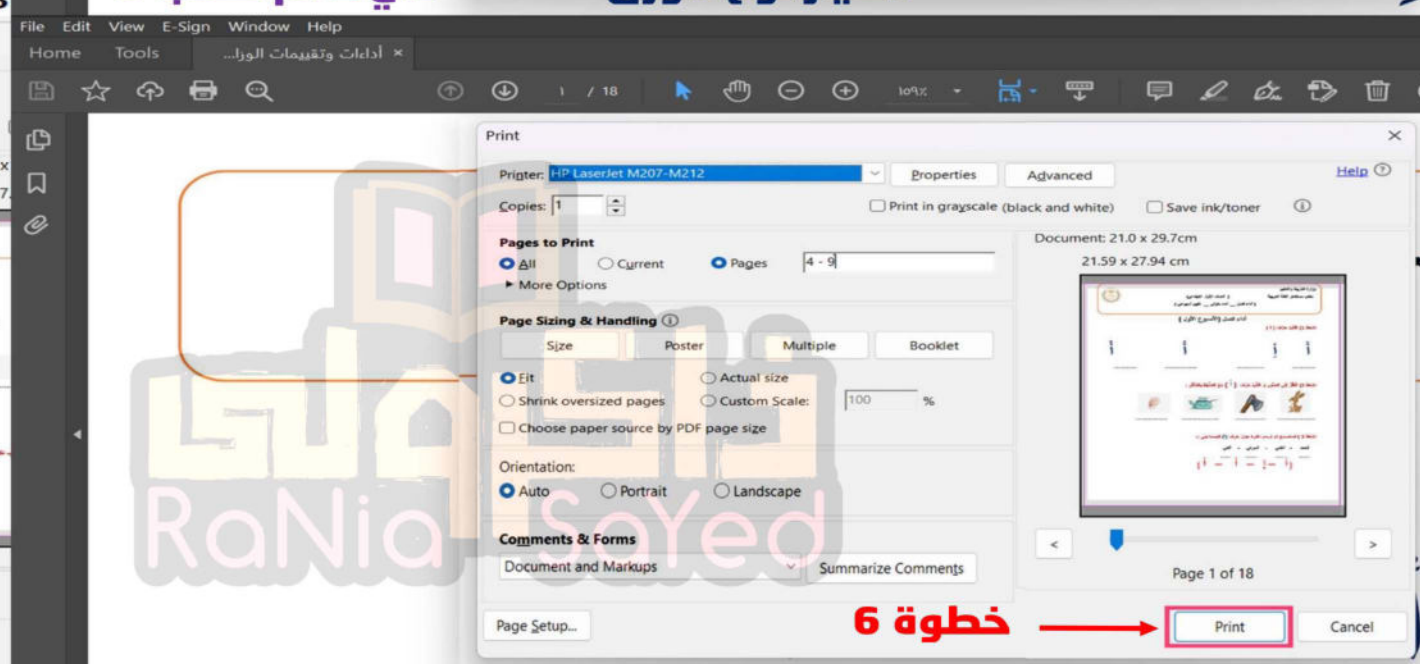
خطوة 2  
اختيار اسم  
الطابعة  
بتاعتك

خطوة 3  
كتابة الصفحات  
المراد طباعتها  
نكتب رقم 4 ثم  
نكتب الشرطة  
دي - ثم نكتب 9

خطوة 4  
اختيار نوع الورق



خطوة 5  
اختيار A4



خطوة 6

حمل الآن

مجاناً وحصرياً

# امتحانات رقم (2)

## الترم الثاني



## Model (1)

20  
Marks

### 1 (A) Choose the correct answer:

- Most weather phenomena occur in the ..... layer of the atmosphere.

- a) troposphere      b) mesosphere      c) thermosphere      d) exosphere

### (B) Give a reason for:

1 The regions near the equator have high temperatures.

.....  
.....

2 The emperor penguin has thick skin covered with dense feathers.

.....

3 Hot air moves upward above cold air.

.....

4 Farmers resort to developing agricultural methods in the desert environment.

.....  
.....

### 2 (A) Complete the following sentence:

- Soil provides ..... for plant growth.

### (B) What happens when..?

1 The cold air is warmed by the effect of solar energy.

.....

2 We move up toward the top of a mountain. "relative to the atmospheric pressure"

.....

3 We move down toward the bottom of a mountain. "relative to the air density"

.....

4 The amount of solar energy that reaches the Earth differs from one place to another.

.....  
.....

### 3 (A) Write the scientific term:

1 The movement of water between different water bodies and the atmosphere. (.....)

2 A type of cats that have long, silky hair with different colors. (.....)



**(B) Answer the following questions:**

- 1 Mention the main processes that affect the water cycle.

.....

.....

.....

- 2 What are the causes of desertification?

.....

.....

.....

- 3 Write what you know about humus.

.....

.....

**4 (A) Put (✓) or (X):**

- 1 Soil fertility decreases when the amount of organic matter increases. ( )
- 2 Sandstorms do not cause any harm to vehicle drivers. ( )

**(B) Answer the following questions:**

- 1 The soil can be classified into three types. Mention the three types of soil.

.....

.....

.....

- 2 Mention one positive effect of volcanic eruptions.

.....

- 3 Mention two ways to reduce soil erosion.

.....

.....

## Model (2)

20  
Marks

### 1 (A) Choose the correct answer:

- Desert plants have thick stems and leaves to ..... .
- |                  |                                    |
|------------------|------------------------------------|
| a) store water   | b) keep herbivores away            |
| c) produce seeds | d) increase the rate of water loss |

### (B) Give a reason for:

- 1 Decomposers disappear from soil.  
.....
- 2 As moist air encounters the mountains, it rises and condenses, forming clouds. "Mention the name of this phenomenon."  
.....
- 3 The Arctic region is characterized by very cold weather.  
.....
- 4 Desert plants have sharp thorns.  
.....

### 2 (A) Write the scientific term:

- Large areas of land which are formed due to the effect of dry air. (.....)

### (B) What happens when...?

- 1 The sunlight falls very inclined on a certain area.  
.....  
.....
- 2 The African penguin migrates to the South Pole.  
.....
- 3 Deforestation and excessive use of pesticides occur.  
.....
- 4 Water vapor condenses in the sky.  
.....

### 3 (A) Put (✓) or (X):

- 1 Energy does not transfer during the water cycle in nature. ( )
- 2 Weather is the atmospheric condition over a long period of time. ( )

**(B) What is the importance or function of ...?**

**1** The soil for living organisms.

.....

.....

**2** The anemometer.

.....

**3** Genes.

.....

**4 (A) Complete the following sentence using the words between brackets:**

- Water evaporates from plant leaves during the ..... process.  
( cellular respiration – transpiration )

**(B) Answer the following:**

**1** Floods cause many damages. Mention one of them.

.....

**2** Mention the two factors that determine the direction of the wind.

.....

.....

**3** Mention two challenges that birds face during their migration journey.

.....

.....

**4** Imagine there is a water pond in a desert area and another in a cold region. Both ponds are exposed to sunlight with the same intensity . Which one has a higher evaporation rate?

.....

.....



## Model (3)

20  
Marks

### 1 (A) Choose the correct answer:

- Which of the following is not a weather factor? .....

- |                 |               |
|-----------------|---------------|
| a) Temperature  | b) Earthquake |
| c) Air pressure | d) Wind       |

### (B) Give a reason for:

1 Sandy soil does not retain water for a long time.

.....

2 The difference in atmospheric pressure from one region to another on the Earth's surface.

.....

.....

3 The clay soil has the ability to retain water.

.....

4 Birds migrate from one place to another.

.....

.....

### 2 (A) Complete the following sentence using the words between brackets:

- ..... roots in desert plants help in absorbing the maximum amount of groundwater.

(Short – Long)

### (B) Answer the following questions:

1 What happens when the minerals in soil settle down to the lower layers?

.....

2 Mention some devices that can be used to carry measuring instruments high into the atmosphere.

.....

3 Mention the three main processes that affect the water cycle.

.....

.....

.....

4 Mention examples of the water reservoirs on Earth.

.....

**3 (A) Correct the underlined word:**

- Water moves from the oceans to the air through runoff process. (.....)

**(B) What happens .....**

**1** When water vapor in air hits a cold glass of juice.

.....

**2** If water and light are not available "relative to plants".

.....

**3** If a bog contains sand soil in a larger amount than clay soil . "relative to the water storage".

.....

**4 (A) Cross out the odd word:**

- Its color is yellow. / Its particles retain water. / Its particles are large in size. / It has high porosity.

(.....)

**(B) Answer the following:**

**1** What is meant by convection?

.....

**2** Compare between air currents and wind.

| Air currents | Wind  |
|--------------|-------|
| .....        | ..... |

**3** Arrange the following according to size of particles "in ascending order":

(sand soil – clay soil – silt soil)

.....

## Model (4)

20  
Marks

### 1 (A) Write the scientific term:

- It is the process in which matter changes from gaseous state to liquid state. (.....)

### (B) Answer the following questions:

1 If you have two plants, one placed in the shade and the other in the sun, which plant transpires at a higher rate?

.....

2 Mention the factors affected by elevation above sea level.

.....

.....

3 List the factors that may affect the plant during photosynthesis process.

.....

.....

4 Compare between organic materials and non-organic materials of the soil with giving examples.

| Points of comparison | Organic materials | Inorganic materials |
|----------------------|-------------------|---------------------|
| Definition           | .....<br>.....    | .....<br>.....      |
| Examples             | .....             | .....               |

### 2 (A) Correct the underlined word:

- The cell nucleus helps in digestion. (.....)

### (B) What is the meaning of...?

1 Transpiration process.

.....

2 Climate.

.....

3 Migration.

.....

.....

4 Soil.

.....



### 3 (A) Put (✓) or (X):

- 1 Smoking is a bad lifestyle choice. ( )
- 2 Water heats up faster than sand. ( )

**(B) Give a reason for ....:**

- 1 Ice forms on mountain tops.

- 2 The genetic factors make the Dorcas deer adapt and survive in desert environment.

- 3** The soil has important role in the environment.

**4 (A) Choose the correct answer:**

- 1** When a liquid is heated, it will ..... and become less dense and .....

- a) expand – heavier                      b) contract – lighter  
c) expand – lighter                        d) contract – heavier

- 2** What types of plants are likely to grow in dry, porous soil?

- a) Shrubs.                      b) Tall tree.                      c) Ferns.                      d) Algae.

**(B) Mention the importance of:**

- 1 Weather radar.

- 2 Stomata.

- ### 3 Weather maps.

## Model (5)

20  
Marks

### 1 (A) Choose the correct answer:

- Any ecosystem contains biotic factors such as .....

a) plants

b) air

c) water

d) soil

### (B) Mention the importance of:

1 Rain gauge.

.....

2 Convection currents.

.....

.....

3 Floods.

.....

4 Genes.

.....

### 2 (A) Complete the following sentence:

- ..... and ..... processes occur as a result of water particles losing thermal energy.(B)

### What happens when..?

1 A plant doesn't receive enough light in its environment.

.....

2 Sanitation services are not available in the environment.

.....

3 The Earth's temperature increases. "relative to the effect on soil"

.....

4 Boiling water in a pot on the stove "concerning the movement of hot water and cold water".

.....

### 3 (A) Write the scientific term:

1 Spaces exist between soil particles and are filled with water or air. (.....)

2 Living organisms help in recycling nutrients from dead plants and animals back to the soil.

(.....)

**(B) Give a reason for:**

- 1 Poison dart frog has colorful poisonous skin.

.....

- 2 Large trees don't grow in grassland ecosystem.

.....

- 3 Although volcanic eruptions have destructive effects, they may also have some benefits.

.....

**4 (A) Correct the underlined words:**

- 1 Minerals are the building units of plants. (.....)

- 2 In the water cycle, the step that follows condensation process is runoff process. (.....)

**(B) Answer the following questions:**

- 1 What is the difference between soil in bogs and desert in holding water?

| Bogs soil | Desert soil |
|-----------|-------------|
| .....     | .....       |

- 2 Mention three ways to reduce water pollution.

.....

.....

.....

- 3 What is the meaning of Meteorology?

.....



## Model (1)

20  
Marks

### 1 (A) Choose the correct answer:

- Most weather phenomena occur in the ..... layer of the atmosphere.

- a) **troposphere**      b) mesosphere      c) thermosphere      d) exosphere

### (B) Give a reason for:

1 The regions near the equator have high temperatures.

- **Because the Sun's rays fall perpendicularly, and concentrated on a smaller area giving high effect of heat.**

2 The emperor penguin has thick skin covered with dense feathers.

- **To protect itself from freezing.**

3 Hot air moves upward above cold air.

- **Because hot air is less dense than cold air.**

4 Farmers resort to developing agricultural methods in the desert environment.

- **Because the desert environment has harsh conditions, such as limited water resources, poor soil, and high temperatures.**

### 2 (A) Complete the following sentence:

- Soil provides .....**nutrients**.... for plant growth.

### (B) What happens when..?

1 The cold air is warmed by the effect of solar energy.

- **The density of the air decreases and it rises upward.**

2 We move up toward the top of a mountain. "relative to the atmospheric pressure"

- **The atmospheric pressure decreases.**

3 We move down toward the bottom of a mountain. "relative to the air density"

- **Air density increases.**

4 The amount of solar energy that reaches the Earth differs from one place to another.

- **This leads to unequal heating of the Earth's surface, with some areas being warmer or cooler than others.**

### 3 (A) Write the scientific term:

1 The movement of water between different water bodies and the atmosphere. (**Water cycle**)

2 A type of cats that have long, silky hair with different colors. (**Birman Cats**)

**(B) Answer the following questions:**

1 Mention the main processes that affect the water cycle.

1- Evaporation      2- Condensation      3- Precipitation.

2 What are the causes of desertification?

1- Excessive cutting of forest trees.

2- Occurrence of drought.

3- Overgrazing.

3 Write what you know about humus.

- It is dark, organic material found in soil, formed from the decomposition of dead plants, animals, and microorganisms.

**4 (A) Put (✓) or (X):**

1 Soil fertility decreases when the amount of organic matter increases.

( X )

2 Sandstorms do not cause any harm to vehicle drivers.

( X )

**(B) Answer the following questions:**

1 The soil can be classified into three types. Mention the three types of soil.

1- Sand soil      2- Clay soil      3- Silt soil

2 Mention one positive effect of volcanic eruptions.

They increase the soil fertility.

3 Mention two ways to reduce soil erosion.

1- Increasing the planted areas.

2- Digging canals or trenches

## Model (2)

20  
Marks

### 1 (A) Choose the correct answer:

- Desert plants have thick stems and leaves to ..... .
- a) store water
  - b) keep herbivores away
  - c) produce seeds
  - d) increase the rate of water loss

### (B) Give a reason for:

- 1 Decomposers disappear from soil.  
- **The recycling of nutrients won't occur which causes environmental imbalance.**
- 2 As moist air encounters the mountains, it rises and condenses, forming clouds. "Mention the name of this phenomenon."  
- **This is known as the rain shadow phenomenon.**
- 3 The Arctic region is characterized by very cold weather.  
- **Because the sunlight falls at a very inclined angle on this region.**
- 4 Desert plants have sharp thorns.  
- **To protect themselves from herbivores.**

### 2 (A) Write the scientific term:

- Large areas of land which are formed due to the effect of dry air. (Deserts)

### (B) What happens when...?

- 1 The sunlight falls very inclined on a certain area.  
- **Its heat is distributed over a very large area giving the lowest effect of heat, and the climate becomes very cold.**
- 2 The African penguin migrates to the South Pole.  
- **The African penguin is not adapted to the extreme cold of the South Pole and it won't be able to survive.**
- 3 Deforestation and excessive use of pesticides occur.  
- **It leads to environmental pollution and habitat destruction.**
- 4 Water vapor condenses in the sky.  
- **Formation of clouds.**

### 3 (A) Put (✓) or (X):

- 1 Energy does not transfer during the water cycle in nature. (X)
- 2 Weather is the atmospheric condition over a long period of time. (X)

**(B) What is the importance or function of ...?**

1 The soil for living organisms.

- **Soil provides essential nutrients for plants, a home for different living organisms, like worms.**

2 The anemometer.

- **It is used to measure the speed of the wind.**

3 Genes.

- **Carry inherited traits.**

**4 (A) Complete the following sentence using the words between brackets:**

- Water evaporates from plant leaves during the ..... process.

( cellular respiration – **transpiration** )

**(B) Answer the following:**

1 Floods cause many damages. Mention one of them.

- **The destruction of buildings.**

2 Mention the two factors that determine the direction of the wind.

1- **The amount of sun rays**

2- **The rotation of the Earth around its axis.**

3 Mention two challenges that birds face during their migration journey.

1- **Severe climatic condition**

2- **Predatory animals**

**4 Imagine there is a water pond in a desert area and another in a cold region. Both ponds are exposed to sunlight with the same intensity . Which one has a higher evaporation rate?**

- **The rate of water evaporation from the desert pond will be higher than that from the cold region pond.**



## Model (3)

20  
Marks

### 1 (A) Choose the correct answer:

- Which of the following is not a weather factor? .....

a) Temperature

**b) Earthquake**

c) Air pressure

d) Wind

### (B) Give a reason for:

1 Sandy soil does not retain water for a long time.

**- Because it has large particles.**

2 The difference in atmospheric pressure from one region to another on the Earth's surface.

**- Because as we go higher, the temperature, air pressure (atmospheric pressure), and air density decrease.**

3 The clay soil has the ability to retain water.

**- Clay soil has very small particles preventing water from draining quickly.**

4 Birds migrate from one place to another.

**- To search for food resources, suitable weather conditions, that help them survive and reproduce.**

### 2 (A) Complete the following sentence using the words between brackets:

- ..... roots in desert plants help in absorbing the maximum amount of groundwater.

(Short – **Long**)

### (B) Answer the following questions:

1 What happens when the minerals in soil settle down to the lower layers?

**- Formation of solid layer which the plant roots can't penetrate it.**

2 Mention some devices that can be used to carry measuring instruments high into the atmosphere.

**- Satellites and aircrafts.**

3 Mention the three main processes that affect the water cycle.

**1- Evaporation**

**2- Condensation**

**3- Precipitation**

4 Mention examples of the water reservoirs on Earth.

**- Oceans – Seas Lakes – Rivers Glaciers – Rocks – Atmosphere.**

**3 (A) Correct the underlined word:**

- Water moves from the oceans to the air through runoff process.

(**evaporation**)

**(B) What happens .....**

**1** When water vapor in air hits a cold glass of juice.

- **The water vapor condenses into liquid droplets on the surface of the glass.**

**2** If water and light are not available "relative to plants".

- **If water and light are not available, plants cannot carry out photosynthesis, which means they cannot produce their own food.**

**3** If a bog contains sand soil in a larger amount than clay soil . "relative to the water storage".

- **The soil will retain less water, because sand particles are larger and have larger pores, which allows water to drain quickly.**

**4 (A) Cross out the odd word:**

- Its color is yellow. / Its particles retain water. / Its particles are large in size. / It has high porosity.

(**Its particles retain water.**)

**(B) Answer the following:**

**1** What is meant by convection?

- **It is the process in which heat transfers in liquids and gases, where hot molecules rise up while cold molecules fall down.**

**2** Compare between air currents and wind.

| Air currents                               | Wind                                         |
|--------------------------------------------|----------------------------------------------|
| <b>They are Vertical movements of air.</b> | <b>It is the Horizontal movement of air.</b> |

**3** Arrange the following according to size of particles "in ascending order":

(sand soil – clay soil – silt soil)

- **Sand soil – Silt soil – Clay soil**

## Model (4)

20  
Marks

### 1 (A) Write the scientific term:

- It is the process in which matter changes from gaseous state to liquid state. (**Condensation**)

### (B) Answer the following questions:

1 If you have two plants, one placed in the shade and the other in the sun, which plant transpires at a higher rate?

- **The plant that is exposed to the sun.**

2 Mention the factors affected by elevation above sea level.

1- **Atmospheric pressure**

2- **The air temperature**

3- **The air density**

3 List the factors that may affect the plant during photosynthesis process.

1- **Availability of water**

2- **Light intensity**

3- **Light duration**

4 Compare between organic materials and non-organic materials of the soil with giving examples.

| Points of comparison | Organic materials                              | Inorganic materials                                |
|----------------------|------------------------------------------------|----------------------------------------------------|
| Definition           | <b>They are living components of the soil.</b> | <b>They are non-living components of the soil.</b> |
| Examples             | <b>Plants – Insects</b>                        | <b>Minerals – Water</b>                            |

### 2 (A) Correct the underlined word:

- The cell nucleus helps in digestion. (**reproduction**)

### (B) What is the meaning of...?

1 Transpiration process.

- **It is a type of evaporation that takes place through the stomata on the plant's leaves.**

2 Climate.

- **It is the expected state of the atmosphere over an extended period of time.**

3 Migration.

- **It is a type of behavioral adaptation in which living organisms migrate from one place to another.**

4 Soil.

- **It is the thin layer which covers the Earth's crust.**

### 3 (A) Put (✓) or (X):

- 1 Smoking is a bad lifestyle choice. (✓)
- 2 Water heats up faster than sand. (✗)

**(B) Give a reason for ....:**

- 1 Ice forms on mountain tops.
  - **Due to the extremely low temperatures.**
- 2 The genetic factors make the Dorcas deer adapt and survive in desert environment.
  - **Because they help it adapt with the high temperature and water shortage.**
- 3 The soil has important role in the environment.
  - **Because it determines the type of plants that can grow in it and affects the species of animals that live in the environment.**

**4 (A) Choose the correct answer:**

- 1** When a liquid is heated, it will ..... and become less dense and ..... .  
a) expand – heavier                      b) contract – lighter  
**c) expand – lighter**                      d) contract – heavier
- 2** What types of plants are likely to grow in dry, porous soil?  
**a) Shrubs.**                      b) Tall tree.                      c) Ferns.                      d) Algae.

**(B) Mention the importance of:**

- 1 Weather radar.
  - It is used to determine the intensity and speed of precipitation and track thunder storms and hurricanes.
- 2 Stomata.
  - They help plant to get rid of excess water in the form of water vapor through transpiration process.
- 3 Weather maps.
  - Representing weather data and measurements on a map.



## Model (5)

20  
Marks

### 1 (A) Choose the correct answer:

- Any ecosystem contains biotic factors such as .....

a) plants

b) air

c) water

d) soil

### (B) Mention the importance of:

1 Rain gauge.

- It is used to measure the amount of rainfall in a specific area.

2 Convection currents.

- They help in moving water vapor through the atmosphere, forming clouds, and determining the regional climate.

3 Floods.

- Some ecosystems depend on periodic floods, such as ecosystems along the Nile.

4 Genes.

- They carry the traits which are responsible for determining the body's features.

### 2 (A) Complete the following sentence:

- **Condensation** and **freezing** processes occur as a result of water particles losing thermal energy.

### (B) What happens when..?

1 A plant doesn't receive enough light in its environment.

- The plant can't make photosynthesis process.

2 Sanitation services are not available in the environment.

- Spreading of different diseases will occur.

3 The Earth's temperature increases. "relative to the effect on soil"

- The soil dries up and loses its nutrients.

4 Boiling water in a pot on the stove "concerning the movement of hot water and cold water".

- The hot water moves up and cold water moves down.

### 3 (A) Write the scientific term:

1 Spaces exist between soil particles and are filled with water or air.

(Soil pores)

2 Living organisms help in recycling nutrients from dead plants and animals back to the soil.

(Decomposers)

**(B) Give a reason for:**

- 1 Poison dart frog has colorful poisonous skin.  
- **To hide from its enemies and protect itself.**
- 2 Large trees don't grow in grassland ecosystem.  
- **Because grassland ecosystem has sand soil that is loose, drains water quickly and dry.**
- 3 Although volcanic eruptions have destructive effects, they may also have some benefits.  
- **Because they make the soil fertile.**

**4 (A) Correct the underlined words:**

- 1 Minerals are the building units of plants. (rocks)
- 2 In the water cycle, the step that follows condensation process is runoff process. (precipitation)

**(B) Answer the following questions:**

- 1 What is the difference between soil in bogs and desert in holding water?

| Bogs soil              | Desert soil                     |
|------------------------|---------------------------------|
| Clay soil holds water. | Sand soil drains water quickly. |

- 2 Mention three ways to reduce water pollution.
  - 1- **Treatment of sewage.**
  - 2- **Keeping green areas.**
  - 3- **Using suitable amount of fertilizers.**
- 3 What is the meaning of Meteorology?  
- **It is the science of studying and predicting the weather.**

حمل الآن

مجانا وحصريا

# امتحانات رقم (3)

## الترم الثاني



Science

Exam

1

1 A) Write the scientific term:

- It is considered the main source of energy in the water cycle. (.....)

B) Give a reason for each of the following:

- (1) Sandstorms have harmful effects on human health.  
▶ .....
- (2) The formation of clouds in the sky. ▶ .....
- (3) The weather in the area near the Equator is hot.  
▶ .....

C)  compare: Birman cats and Pharaonic cats.

| Birman cats | Pharaonic cats |
|-------------|----------------|
| ▶ .....     | ▶ .....        |
| ▶ .....     | ▶ .....        |

2 A)  Choose from the word bank

- higher

lower

the same
- (1) At the top of the mountain, the air pressure is .....
- (2) The temperature is .....
- (3) The air density is .....

B) What happens when:

- (1) The rate of evaporation of water in a lake increases.  
▶ .....
- (2) Dust accumulates on solar panel. ▶ .....
- (3) Sand and water are exposed for a whole day to the sunlight?  
▶ .....
- (4) Mention the importance of a barometer. ▶ .....

3 A) Choose the correct answer:

- (1) It is the transformation of water vapor into liquid water droplets in the air .....  
(a) Transpiration      (b) Evaporation      (c) Condensation      (d) Melting



- (2) Oceans help improve the world's climate through .....
- (a) Heat absorption

(b) Nitrogen gas absorption

(c) Salt storage

(d) Water storage

**B) Mention the function of:**

- (1) anemometer

▶ .....
- (2) rain gauge.

▶ .....
- (3) weather radar.

▶ .....

**4 A) Complete the following sentences:**

- (1) Water vapor condenses in the sky to form .....

(2) Heavy rain for a long period of time may cause .....

**B)**  How is energy transfer related to the Water Cycle? What elements shape local and regional weather changes surrounding you?

▶ .....

**C) Define:**

- (1)  Reservoir:

▶ .....
- (2)  Convection current:

▶ .....

**Science Exam 2**

**1 A) Choose the correct answer:**

-  Among the forms of precipitation .....

(a) Rain, hail, and snow

(b) Sun, rain, and snow

(c) Seas, rivers, and oceans

(d) Mountains, valleys, and rivers

**B) What happens ....?**

- (1) To the atmospheric pressure as we move up toward the top of a mountain.

▶ .....
- (2) Sunlight falls on snow.

▶ .....
- (3) Water gains high heat energy.

▶ .....
- (4) The weather is dry for a long time.

▶ .....

**2 A) Correct the underlined word:**

- Deserts are formed by the effect of moist air

(.....)

**B) State the function of:**

- (1) Weather map.

▶ .....

(2) A genetic factor. ► .....

**C) Mention:**

(1) The two factors affecting the water cycle. (.....)

(2) The steps of studying weather. (.....)

**3 A) Write the scientific term:**

● The seasonal movement of animals from one place to another. (.....)

**B)** Explain how meteorologists represent weather forecasts as probability ratios.

► .....

**C)** What are the effects and the costs of too much or too little precipitation?

► .....

**D)** Where does the energy that drives convection currents come from?

► .....

**4 A) Complete the following sentences:**

(1) If a meteorologist wants to know the speed of a tornado's winds

They should use .....

(2) If a meteorologist wants to know whether it rained more this summer or last summer

They should use .....

(3) If a meteorologist wants to know the possible path of a hurricane

They should use .....

(4) If a meteorologist wants to know the current atmospheric pressure

They should use .....

**B) Define:** Humidity: ► .....

**C)** How do genetic factors help dorcas gazelle withstand high temperatures?

► .....

**D)** What can be done to slow down the erosion of soil?

► .....

**Science**

**Exam**

**3**

**1 A) Choose the correct answer:**

● The temperature may reach more than 50 degrees in Aswan in the summer. This reflects .....

(a) Humidity

(b) Atmosphere

(c) Weather

(d) Climate

**B) Give a reason for each of the following:**

- (1)

 Decomposers play a crucial role in the ecological balance in the ecosystem

▶
- (2)

About 10% of the water vapor in the air comes from plants.

▶
- (3)

 The plants of the Western Desert in Egypt have thick stems and leaves.

▶
- C)

How does the amount of solar energy affect the transpiration rate of plants' leaves?

▶

**2 A) Complete the following sentence:**

- Melting ice in an area can cause .....
- B)

**Explain the scientific reason:**
- (1)

Water falls into the ground. ▶
- (2)

When air is heated. ▶
- C)

What is the limited resource of water in the desert? ▶
- D)

 What are the consequences of invasive organisms entering a natural habitat?

▶

**3 A) Write the scientific term:**

- (1)

The amount of water vapor in the air.

(.....)
- (2)

A device used to track thunderstorms, hurricanes and rainfall speed.

(.....)
- B)

**Define:**  Density: ▶
- C)

 How do global winds affect the climate of an area?

▶
- D)

 How can you describe soil variety? ▶

**4 A) Choose the correct answer:**

- (1)

 Snow falls during the process of .....

(a)

weathering

(b)

precipitation

(c)

evaporation

(d)

runoff
- (2)

 Smoking practice is .....

(a)

genetic factors

(b)

lifestyle

(c)

traits

(d)

environmental factor
- B)

**Give a reason for each of the following:**
- (1)

 The rareness of precipitation of rainfall in the deserts.

▶

- (2) The changing of water from one state to another state. ► .....
- (3) Sand loses heat faster than water. ► .....

## Science

## Exam

4

### 1 A) Choose the correct answer:

-  The process of moving rocks from one place to another is known as .....  
 (a) weathering      (b) erosion      (c) desertification      (d) condensation
- B) Why does hot air move upward while cold air moves downward?  
 ► .....
- C) What do you know about the Chrysanthemum plant?  
 ► .....
- D)  Explain why clay soil retains water well? ► .....
- E) How do decomposers help in soil formation? ► .....

### 2 A) Choose the correct answer:

-  All the following are inherited traits in humans, except .....  
 (a) eye color      (b) nose shape      (c) fur color      (d) ear shape
- B) Why is the anemometer important? ► .....
- C)  What do you know about overgrazing? ► .....
- D) Give a reason for: The lizard's body is covered with sandy-colored scales.  
 ► .....
- E) How does the amount of sunlight affect plant growth?  
 ► .....

### 3 A) Choose the correct answer:

- (1)  The amount of water vapor in the air is known as .....  
 (a) condensation      (b) humidity      (c) evaporation      (d) precipitation
- (2)  Desertification results from the .....  
 (a) horticulture      (b) over-cutting of forests  
 (c) allowing native plants to flourish      (d) gradual farming
- B) **What happens when:**
- (1) Cold water is placed on top of hot water.  
 ► .....



(2)  The African penguin has moved to the South Pole.



(3)  Mention one harm caused by sandstorms.



4 A) Put (✓) or (X):

(1) Sand particles in the soil are the largest-sized particles ( )

(2) Hereditary traits don't play a role in the ability of living organisms to survive. ( )

B) Why is soil very important for plants? 

C) What happens when the sun's rays fall perpendicularly to a certain area?



D) Do plants have any role in the water cycle? Explain.



Science Exam 5

1 A) Choose the correct answer:

●  Humus is rich in .....  
(a) water (b) nutrients (c) sand grains (d) oxygen

B) Why is the weather at the poles very cold?



C) What happens to water on Earth's surface when its temperature rises due to the Sun?



D) Why is humus important for soil and plants?



E) Mention the importance of a thermometer.



2 A) Choose the correct answer:

●  A sphynx cat has .....  
(a) very long hair (b) long and silky hair (c) no hair or very fine hair (d) black feathers

B)  What are the consequences of soil drainage?



C) What happens when it keeps raining for a long time?



D) Why do farmers use animal manure to restore soil?

▶ .....

E) Explain the role of gravity in the water cycle.

▶ .....

3 A) Write the scientific term:

(1) The continuous movement of water among different water sources or reservoirs. ( ..... )

(2) The force that causes the falling of rain and snow on Earth's surface. ( ..... )

B) What happens if the poison dart frog doesn't have big eyes?

▶ .....

C) Define: Soil. ▶ .....

D) Compare sand soil and clay soil according to water retention.

| SAND SOIL | CLAY SOIL |
|-----------|-----------|
| .....     | .....     |

4 A) Choose the correct answer:

(1) Which of the following is an abiotic component of soil? .....

(a) Decomposers (b) Plants (c) Air (d) Fungi

(2) The arrangement of soil types according to the size of soil particles from the largest to the smallest are .....

(a) Sand,silt,clay (b) clay,silt,sand (c) clay,sand,silt (d) silt,clay,sand

B) Why does the amount of water on Earth's surface not change?

▶ .....

C) What happens when the size of soil particles is large?

▶ .....

D) Mention one method to slow down soil erosion.

▶ .....

Science

Exam

6

1 A) Write the scientific term:

● The science of studying and predicting the weather. ( ..... )

- B)** What are the types of adaptations plants have in the desert?  
▶ .....
- C)** What happens to living organisms if water and light are not available?  
▶ .....
- D)** Why is humus important for soil and plants? ▶ .....
- E)** Give an example of behavioral adaptation in animals.  
▶ .....

**2 A) Choose the correct answer:**

-  The white fur of a polar bear that allows it to live in extremely cold regions is considered ..... adaptation.  
(a) structural      (b) behavioral      (c) mechanical      (d) chemical
- B)** What happens when the dust accumulates on solar panels?  
▶ .....
- C) Give a reason for each of the following:**
- (1)  Adding sand and silt helps in soil restoration.  
▶ .....
- (2) The danger of flooding increases if the land is frozen.  
▶ .....
- (3)  Some desert plants have thick stems or leaves. ▶ .....

**3 A) Write the scientific term:**

- (1) The loose layer that covers Earth's surface. ( ..... )
- (2) The seasonal movement of animals from one place to another is considered a behavioral adaptation. ( ..... )
- B)** Why does hot air move upward above cold air? ▶ .....
- C)** What happens to the soil that holds a medium amount of water?  
▶ .....
- D)** How does the intensity of the light affects plants' growth?  
▶ .....

**4 A) Write the scientific term:**

-  One of the behavioral adaptations is .....  
(a) stem thorns in plants      (b) thick fur  
(c) wide eyes in dart frog      (d) bird migration

**B) Write the scientific term:**

Structures in the living organism cell that transfer traits from parents to offspring.

( ..... )

**C) Why is condensation important in the water cycle?**

▶ .....

**D) What happens when sunlight falls on snow?**

▶ .....

**E) Mention two basic needs of living organisms to survive.**

▶ .....

**Science**

**Exam**

**7**

**1 A) Choose the correct answer:**

- The soil with the medium-sized particles is ..... soil.

(a) sand

(b) silt

(c) clay

(d) hard

**B) Why do young rabbits resemble their parents?**

▶ .....

**C) What is the difference between biotic and abiotic factors?**

▶ .....

**D) Why do farmers add straw and animal manure to the soil?**

▶ .....

**E) Mention the importance of a rain gauge.**

▶ .....

**2 A) Choose the correct answer:**

- All pet cats are the same species. The species is called .....

(a) Berman

(b) Felis catus

(c) Sphynx

(d) German

**B) Why do arctic foxes have thick fur?**

▶ .....

**C) Why do some plants have thorns on their stems?**

▶ .....

**D) What happens when...?**

- There is no decomposers in the soil.

▶ .....

- Follow a diet that contains a large amount of French fries and food drinks.

▶ .....

**3 A) Put (✓) or (X):**

- Removing plants protects the soil from erosion.

( )



- (2) Types of soil differ in their color and their ability to hold water. (       )
- B)  The red lionfish are known as invasive species. Explain that.
- ▶ .....
- C) What happens to the air density as we move down toward the bottom of a mountain?
- ▶ .....
- D) Compare sand soil and silt soil in terms of particle size.

| SAND SOIL | SILT SOIL |
|-----------|-----------|
| .....     | .....     |

4 A) Choose the correct answer:

-  All the following are biotic factors except .....  
(a) insects                      (b) birds                      (c) soil                      (d) grasses
- B) Write the scientific term:  
A process that plants' leaves get rid of excess water in the form of water vapor. ( ..... )
- C) Why is the soil called a loose layer? ▶ .....
- ▶ .....
- D) What happens if The African penguin has dense feathers around each eye?
- ▶ .....
- E) Mention one effect of drought. ▶ .....

1 A) Choose the correct answer:

-  The main factor affecting the movement of wind and water on Earth's surface is .....  
(a) transpiration in plants                      (b) unequal solar heating  
(c) evaporation from oceans                      (d) gravity
- B) Why do Emperor penguins have thick blubber and dense feathers?
- ▶ .....
- C) What happens when heavy rain falls on the soil (in terms of nutrients)?
- ▶ .....
- D) Why is the anemometer important for weather studies?
- ▶ .....
- E) How do genes affect the shape of the human's noses?
- ▶ .....

## 2 A) Choose the correct answer:

- Which of the following is a method of reducing erosion due to both wind and water?
  - (a) Planting a rain garden
  - (b) Building a dam
  - (c) Planting trees
  - (d) Weed removal
- B) Why do bogs retain water for a long time?
 

▶ .....
- C) What happens to rocks if they are affected by weathering processes?
 

▶ .....
- D) Why do some plants in hot deserts have long roots?
 

▶ .....
- E) Mention one difference between water logged soils and sand soil.
 

▶ .....

## 3 A) Put (✓) or (X):

- The size of a living organism is one of the traits that is affected by genetic factors. ( )
- B) **Write the scientific term:**  
It contains biotic factors and abiotic factors that interact with each other. ( )
- C) Why do we feel very hot at the equator? ▶ .....
- D) What happens when very strong winds blow, carrying sand and dust?
 

▶ .....
- E) How can soil variety be described?
 

▶ .....

## 4 A) Choose the correct answer:

- The process by which the land becomes infertile and turns into desert is called .....
  - (a) weathering
  - (b) erosion
  - (c) desertification
  - (d) deposition
- B) **Write the scientific term:**  
The spaces between soil particles that are filled with water or air. ( )
- C) Why does the type of soil vary from one environment to another?
 

▶ .....
- D) What happens to the weather if the sun's rays fall very inclined on an area?
 

▶ .....
- E) Mention two natural factors that destroy habitats.
 

▶ .....

Science

Exam

9

1

A) Complete the following:

- The amount of force that air exerts on its surroundings is called .....
- B)  What is the meaning of soil depletion?  
▶ .....
- C) What is the benefit of digging trenches?  
▶ .....
- D) Mention an example of a process that occurs when matter loses energy.  
▶ .....
- E) How to restore soil health?  
▶ .....

2

A) Complete the following sentence:

- The regions in which the evaporation process is greatest are called .....
- B) Give a reason for each of the following:
  - (1) Nature can cause habitat destruction.  
▶ .....
  - (2)  Overpopulation may cause the destruction of natural habitats.  
▶ .....
- C)  How does a meteorologist predict what the weather will be?  
▶ .....
- D)  What is the relationship between convection and condensation?  
▶ .....

3

A) Choose the correct answer:

- (1)  What happens when the clouds become so heavy that they cannot hold water? .....
  - (a) Water falling on the ground
  - (b) Water evaporates
  - (c) Another cloud forms
  - (d) The clouds become very large

- (2)  The main factor affecting the movement of wind and water on the Earth's surface is
- (a) The unequal solar heating system
  - (b) Transpiration process in plants
  - (c) The evaporation process from oceans and seas
  - (d) The flow of water across the Earth's surface due to gravity
- B)**  What happens if there is no wind?
- ▶ .....
- C)**  What increases erosion of the soil and what can be done to slow it down?
- ▶ .....
- D)**  Where does the energy that drives convection currents come from?
- ▶ .....

4

### A) Use the word bank to label each example with the correct part of the water cycle:

condensation - evaporation - precipitation - runoff

- (1) A shallow river dries up. ( ..... )
- (2) Snow falls on a cold afternoon. ( ..... )
- (3) Fog forms over a field in the morning. ( ..... )
- (4) Water in a river travels down a mountainside and into the sea. ( ..... )

### B) Define:

- (1)  Flooding ▶ .....
- (2)  Sandstorm ▶ .....

- C)**  Write the environmental factor or factors next to the type of an organism behavior it would affect (size of habitat, water, availability of light) for: A plant that carries out photosynthesis.
- ▶ .....
- ▶ .....



**Model Answer****Exam (1)**

- 1 **A)** The sun (or solar radiation/sunlight)  
**B)** (1) Because they reduce visibility. Dust can pose health risks for the lungs or if it blows into the eyes.  
 (2) Clouds form when water vapor condenses into water droplets and form a cloud.  
 (3) The perpendicular rays of the sun when focused on a smaller area near the equator, so their effect is greater, and we feel hotter.  
**C)** Birman cats have long, silky hair with varying colors. Sphynx cats have no hair or may have only very fine hair.
- 2 **A)** lower / lower / lower  
**B)** (1) More water vapor rises into the atmosphere.  
 (2) Dust can build up on solar panels, disrupting power generation.  
 (3) Sand heats up and cools off faster than water.  
 (4) A barometer measures atmospheric pressure, which helps meteorologists predict weather changes.
- 3 **A)** (1) Condensation (2) Heat absorption  
**B)** (1) Anemometer records the speed of wind blowing.  
 (2) Rain gauge records how much rain falls in a given area.  
 (3) Weather radar detects precipitation and helps track thunderstorms and hurricanes.
- 4 **A)** (1) clouds (2) flooding  
**B)** energy transfer drives the water cycle. The sun provides heat energy that heats water. that causes evaporation, then condensation and freezing when energy released. Factors are air, temperature, air, pressure, wind, precipitation, humidity, and different landforms.  
**C)** (1) A storage location of water on earth, like oceans, seas, lakes, rivers glaciers, soil, rock, living things, and the atmosphere.  
 (2) it occurs when hotter, less dense air particles rise, and cooler denser air particles sink this creates a circulation pattern.

**Exam (2)**

- 1 **A)** Rain, hail, and snow  
**B)** (1) Atmospheric pressure decreases.  
 (2) The snow may melt as it gains heat energy.  
 (3) It evaporates and changes from liquid to water vapor.  
 (4) Drought occurs, leading to less water for plants, animals, and people.
- 2 **A)** dry  
**B)** (1) It allows meteorologists to identify air masses and track how they are moving.  
 (2) Genetic factor controls what traits get passed down, or inherited, from parent to offspring.
- C)** (1) heat energy (from the sun) and gravity.  
 (2) 1. gathering data using tools and instruments,  
 2. analyzing data on weather maps,  
 3. using computer models to predict how different factors will interact.
- 3 **A)** migration.  
**B)** It means weather forecasts can be uncertain; unexpected changes can affect conditions.  
**C)** Too much precipitation leads to flooding and causes damage to buildings and injuries death. too little

precipitation means Drought or less water for growing crops, and cities.

**D)** The energy that drives convection currents comes from the sun. Solar energy transfers heat through space to Earth's atmosphere through radiation.

- 4 **A)** anemometer / rain gauge / weather radar / barometer  
**B)** Humidity: the measure of how much water vapor is present in the air.  
**C)** The dorcas gazelle inherited from it's parents that it doesn't drink water for long time and it hides in the desert because of it's sandy color.  
**D)** Planting plants or digging trenches in an area helps to reduce erosion.

**Exam (3)**

- 1 **A)** Climate  
**B)** (1) They break down dead plants and animals into chemical nutrients that are released back into the soil.  
 (2) It comes from transpiration, which is evaporation from the leaves of plants.  
 (3) To store water, which helps them survive in arid conditions.
- C)** As the amount of solar energy increases, the transpiration rate increases.
- 2 **A)** flooding  
**B)** (1) Due to gravity, which causes liquid water to percolate down into the ground to the groundwater reservoir.  
 (2) It rises above the cold air and convection current happens.  
**C)** Ground water which is a very small amount of water far below the Earth's surface.  
**D)** It can kill off native plants and animals. They may become the dominant population and cause habitat destruction.
- 3 **A)** (1) Humidity (2) Weather radar  
**B)** Density is how tightly packed the particles in a substance are.  
**C)** As air warmed by the sun's radiation rises, it is replaced by cooler air, creating wind patterns that distribute heat and moisture around the planet.  
**D)** Soils differ due to the amount of organic matter that affects the appearance and the amount of nutrients available. Differences in particle size change the appearance, texture, and ability to retain water.
- 4 **A)** (1) Precipitation. (2) Lifestyle.  
**B)** (1) Because deserts have very little rainfall due to dry air masses.  
 (2) When water gains heat energy, it evaporates or melts. When it loses heat energy, it condenses or freezes.  
 (3) Sand loses heat faster than water because sand heats up and cools off more quickly than water.

**Exam (4)**

- 1 **A)** erosion  
**B)** (1) Hot air expands and becomes less dense, so it rises. Cold air is denser and tends to sink.  
**C)** Chrysanthemum is a plant that only grows when the days are shorter and the nights are longer.  
**D)** Clay particles are the smallest particles, so they have less space between them, which slows the flow of water and allows clay soil to retain water well.  
**E)** Decomposers break down dead plants and animals into nutrient-rich components called humus and return it to the soil, which helps plants grow.

- 2 **A)** fur color  
**B)** It records the speed of wind blowing.  
**C)** Overgrazing occurs when animals eat too much grass before it can grow back.  
**D)** This is a structural adaptation that helps the lizard camouflage in its desert environment, protecting it from predators.  
**E)** Light helps plant growth. However, light that is too intense can damage plant parts and cause drying or burning.
- 3 **A)** (1) humidity (2) over-cutting of forests  
**B)** (1) Convection currents occur. The hot water rises and the cold water sinks, creating circulation.  
(2) It would be unable to survive because it is adapted to the warmer climate of South Africa. Its circle of skin devoid of feathers around its eyes helps cool its body to withstand high temperatures.  
**C)** Sandstorms greatly reduce visibility, which is hazardous to motorists. Dust can pose health risks if inhaled or blows into eyes.
- 4 **A)** (1) ✓ (2) ✗  
**B)** Soil provides nutrients and supports root growth.  
**C)** When the sun's rays fall perpendicular, they are focused on a smaller area, so their effect is greater, and we feel hotter.  
**D)** Yes, about 10 percent of the water vapor in the air comes from transpiration, which is evaporation from the leaves of plants.

**Exam (5)**

- 1 **A)** nutrients  
**B)** At the poles, the sun's rays are very slanted, so their temperature is distributed over a much larger area and their effect is less, so we feel very cold.  
**C)** Water on Earth's surface evaporates as it gains heat energy, changing from liquid to water vapor.  
**D)** because its nutrient-rich soil as it's formed from the decomposed plants and animals.  
**E)** A thermometer measures temperature, which helps meteorologists study and forecast weather.
- 2 **A)** no hair or very fine hair  
**B)** When water drains through soil, nutrients may be washed away from the soil. Minerals may fall below the soil layers, and form a hard layer that the plants' roots cannot penetrate.  
**C)** Continuous heavy rain may cause flooding, as water flows over the edges of riverbanks and onto the land around the river.  
**D)** Farmers use animal manure as a natural fertilizer to add back nutrients that have been depleted from the soil.  
**E)** Gravity causes ice crystals and water droplets in clouds to fall back to Earth's surface. It causes liquid water to flow downhill in streams and rivers toward larger bodies of water.
- 3 **A)** (1) Water cycle (2) Gravity  
**B)** If the poison dart frog doesn't have big eyes, it may not be able to see well enough to find food or avoid predators, reducing its chances of survival.  
**C)** Soil is Earth's delicate, loose skin that is comprised of countless species, and it varies widely from place to place.  
**D)** Sand soil drains water quickly and retains water

poorly because sand particles are large with large spaces between them. Clay soil retains water well because clay particles are very small with tiny spaces between them.

- 4 **A)** (1) Air (2) sand, silt, clay  
**B)** The total amount of water on Earth does not change because it is recycled and reused through the water cycle, even if its state changes from solid to liquid to gas.  
**C)** When soil particles are large (like sand), water flows through quickly and the soil retains water poorly.  
**D)** Planting plants or digging trenches in an area helps to reduce erosion.

**Exam (6)**

- 1 **A)** Meteorology  
**B)** Plants in the desert are adapted to extreme sun exposure and very little rainfall.  
**C)** If water and light are not available, living organisms cannot survive because they need these basic resources for growth and survival.  
**D)** Humus is nutrient-rich and helps plants grow. It is formed when decomposers break down dead plants and animals into components that enter back into the nutrient cycle for plants and animals.  
**E)** Migration is a behavioral adaptation in which animals move from one place to another, usually seasonally. For successful breeding, different food sources, or suitable homelands.
- 2 **A)** structural  
**B)** Dust can build up on solar panels, disrupting power generation.  
**C)** (1) Because the two types of soil together make the soil balanced as sandy soil let water passes quickly while clay soil retains water very well.  
(2) The danger of flooding increases if the land is frozen because frozen ground cannot absorb water.  
(3) They have thick stems or leaves to store water.
- 3 **A)** (1) Soil (2) Migration  
**B)** Hot air expands and becomes less dense, so it rises above the denser cold air.  
**C)** Large particles (sand) create large spaces that allow water to flow quickly. Small particles (clay) create tiny spaces that slow water flow.  
**D)** Some flowering plants bear fruit when the days are longer than the nights and some are the opposite.
- 4 **A)** bird migration  
**B)** Genes  
**C)** Condensation is important because it forms clouds. When water vapor cools and condenses into liquid water droplets, these droplets join together to form clouds.  
**D)** When sunlight falls on snow, the snow may melt as it gains heat energy.  
**E)** Water and light.

**Exam (7)**

- 1 **A)** silt  
**B)** Because they inherit traits from their parents through genes.  
**C)** Biotic factors are living organisms in an environment. Abiotic factors are nonliving factors such as sunlight and air.  
**D)** Farmers add straw and animal manure to restore and maintain soil health by adding back nutrients that have

been depleted.

**E)** A rain gauge records how much rain falls in a given area.

**2 A)** *Felis catus*

**B)** Arctic foxes have thick fur as a structural adaptation to withstand low temperatures.

**C)** Thorns are a structural adaptation that protects plants from herbivores by keeping them away.

**D)** (1) Dead plants and animals would not break down, and nutrients would not be recycled back into the soil.

(2) This can harm your growth and development because your body needs proper nutrition.

**3 A)** (1) ☒ (2) ☒

**B)** Invasive species are species that come into an area and kill off native species. Invasive species are species that come into an area and kill off native population like lionfish are responsible for the loss of 79% of native young fish.

**C)** Air density increases because there is more air above pressing down.

**D)** Sand particles are the largest. Silt are medium particles between sand and clay.

**4 A)** (1) soil

**B)** Transpiration.

**C)** Because it is made up of loose particles that cover the Earth's surface.

**D)** If the African penguin had dense feathers around each eye, it would not be able to cool its body effectively.

**E)** Less water available for growing crops, farming animals, industry, and cities.

#### Exam (8)

**1 A)** unequal solar heating

**B)** To withstand low temperatures to keep them from freezing in the Antarctic.

**C)** Nutrients may be washed away from the soil.

**D)** Anemometer records the speed of wind blowing. Changes in wind speed help predict changes in weather conditions.

**E)** Genes determine inherited traits, including the shape of the nose. These cellular instructions are passed from parents to offspring.

**2 A)** Planting trees

**B)** Clay-rich soils hold water so well that the soil may be wet most of the time. Bogs have clay-rich soil that retains water.

**C)** Rocks break and break down into smaller pieces.

**D)** Some plants in hot deserts have long roots to reach groundwater far below the surface.

**E)** Sand particles have space between them that allow water and air to fill in, while water logged soils have very little air for roots to grow or soil organisms to live.

**3 A)** ☒

**B)** Ecosystem

**C)** At the equator, the perpendicular rays of the sun are focused on a smaller area, so their effect is greater, so we feel hotter.

**D)** Sandstorms occur. They look like a solid wall of debris and dust traveling on the horizon.

**E)** Soil comes in many colors and textures. Soils differ due to different amounts of ingredients and particle sizes.

**4 A)** desertification

**B)** Pores

**C)** Because the climate in an area affects the characteristics of the soil, including the amount of organic matter and the size of particles.

**D)** When the sun's rays fall very inclined, they are distributed over a larger area and their effect is less, so the weather is cooler.

**E)** Hurricanes and floods (or fires, volcanic eruptions, earthquakes).

#### Exam (9)

**1 A)** atmospheric pressure

**B)** Soil depletion is the loss of topsoil and nutrients from the soil due to poor agricultural practices

**C)** It helps reduce erosion.

**D)** Condensation occurs when water vapor loses energy and changes into liquid water.

**E)** By adding backs of nutrients using crop residues like straw or stalks or natural fertilizers like animal manure, also make rotation or diversification of crops.

**2 A)** the equator or tropical regions

**B)** (1) Because many of these changes like hurricanes, floods, volcanic eruptions and earthquakes can be destructive.

(2) Because when populations produce more offspring than can be sustained, it leads to less food, water, shelter, and space for other populations.

**C)** Meteorologists gather data using tools. They analyze data on weather maps and use complex computer models to predict how different factors will interact.

**D)** As warm, moist air rises through convection, it cools and condenses into water droplets, forming clouds by condensation.

**3 A)** (1) Water falling on the ground

(2) The unequal solar heating system

**B)** There would be no movement of air masses, which would affect weather patterns and the distribution of heat and moisture around the planet.

**C)** Increasing erosion can be by removal of vegetation, increased water volume and increased slope of the land and reducing it by planing plants and digging trenches.

**D)** The energy that drives convection currents comes from the sun.

**4 A)** (1) Evaporation (2) Precipitation

(3) Condensation (4) Runoff

**B)** (1) Flooding: When the increase in flow from rainfall is so rapid that water flows over the edges of a riverbank and onto the land around the river.

(2) Sandstorm: When very strong winds blow up sand and/or dust from an area that is extremely dry. Sandstorms look like a solid wall of debris and dust traveling on the horizon.

**C)** A plant that carries out photosynthesis is affected by availability of light and water.



حمل الآن

مجاناً وحصرياً

# امتحانات رقم (4)

## الترم الثاني





# 1 Cairo - Al-Masara Directorate

## Q1. (A) Choose the correct answer:

- 1 Savannas are \_\_\_\_\_ ecosystems.  
 a. wet polar      b. wet grassland      c. dry polar      d. dry grassland
- 2 The change in climate leads to the \_\_\_\_\_ of some living organisms.  
 a. increase      b. extinction      c. reproduction      d. pollution
- 3 The color of sand soil is \_\_\_\_\_.  
 a. yellow      b. green      c. white      d. black
- 4 The barometer is used to measure \_\_\_\_\_.  
 a. air temperature      b. atmospheric pressure  
 c. mass      d. length

**(B) Give a reason for:** A fog is formed in the early morning.

## Q2. (A) Put (✓) or (x):

- 1 Water reservoirs on the Earth include oceans and seas only. ( )
- 2 In the water cycle, the step that follows the condensation process is runoff. ( )
- 3 As the air is warmed by the Sun, the air will go up. ( )
- 4 Melting and transpiration processes only occur by cooling. ( )

**(B) What happens if:** The dust accumulates on solar panels?

## Q3. (A) Write the scientific term:

- 1 It is a loose layer that covers the Earth's surface. (\_\_\_\_\_)
- 2 They are the building blocks of rocks. (\_\_\_\_\_)
- 3 It is a side of mountain ranges at coastal regions that faces the coast. (\_\_\_\_\_)
- 4 They are large areas of land which are formed due to the effect of dry air. (\_\_\_\_\_)

## (B) Cross out the odd word:

Drought - Desertification - Overgrazing - Collection

(\_\_\_\_\_)

## 2 Cairo – Ain Shams Directorate

### Q1. (A) Choose the correct answer:

- 1 When a liquid is heated, it \_\_\_\_\_ and becomes less dense and \_\_\_\_\_.  
 a. expands - heavier                      b. contracts - lighter  
 c. expands - lighter                      d. contracts - heavier
- 2 The form of energy that flows from a hot object to a cold object is called \_\_\_\_\_ energy.  
 a. sound                      b. thermal                      c. magnetic                      d. potential
- 3 The dorcas gazelle lives in \_\_\_\_\_.  
 a. tropical areas                      b. desert areas                      c. the North Pole                      d. the South Pole
- 4 The soil provides the plant with all the following, except \_\_\_\_\_.  
 a. water                      b. air                      c. nutrients                      d. sunlight

**(B) What happens to:** The atmospheric pressure as we move up towards the top of a mountain?

### Q2. (A) Put (✓) or (x):

- 1 Around each eye of the emperor penguin, there is a circle of skin that doesn't have any feathers. ( )
- 2 Sand soil has small-sized particles. ( )
- 3 Although flooding is harmful, it also has some benefits. ( )
- 4 The heat of the Sun transfers through space to the Earth's atmosphere by convection. ( )

**(B) Write the scientific term:** It is a form of evaporation that takes place through the stomata, which are found in plant leaves. (\_\_\_\_\_)

### Q3. (A) Choose from column (B) what suits it in column (A):

| Column (A)      | Column (B)                                       |
|-----------------|--------------------------------------------------|
| 1 Precipitation | a. is the flowing of a river's water into a sea. |
| 2 Run off       | b. has thick white fur.                          |
| 3 Arctic fox    | c. is the falling of snow in an area.            |
| 4 Acacia tree   | d. lives in the desert.                          |

**(B) Compare between different types of soil according to their size of particles:**

| P.O.C             | Sand Soil | Silt Soil | Clay Soil |
|-------------------|-----------|-----------|-----------|
| Size of Particles |           |           |           |



### 3 Cairo – Al-Zayton Directorate

#### Q1. (A) Choose the correct answer:

- 1 The material rich in nutrients and produced from the decomposition of dead organisms is \_\_\_\_\_.  
a. decomposer    b. humus    c. water    d. sand
- 2 Birman cats have \_\_\_\_\_.  
a. very fine hair    b. long and silky hair  
c. no hair    d. black feathers
- 3 The water vapor present in air changes into \_\_\_\_\_ when it hits a cold water bottle.  
a. a gaseous state    b. liquid water    c. steam    d. juice
- 4 The increase in the amount of rain may cause \_\_\_\_\_.  
a. flooding    b. drought    c. sandstorm    d. dust storm

#### (B) What happens to:

- Air density as we move down toward the bottom of a mountain?

#### Q2. (A) Put (✓) or (x):

- 1 Sand absorbs heat slower than water during the daytime. ( )
- 2 Deserts are formed by the effect of moist air. ( )
- 3 The difference between sand soil and clay soil is in the color only. ( )
- 4 Birds migrate to areas that have no food or water. ( )

#### (B) Write the scientific term:

- It is a device used to measure the atmospheric pressure. (\_\_\_\_\_)

#### Q3. (A) Complete the following sentences using the words below:

(light – precipitation – dry – gravity)

- 1 Convection and \_\_\_\_\_ force affect the movement of water through the water cycle.
- 2 Food, water, and \_\_\_\_\_ are the basic needs for living organisms to live and survive.
- 3 Sand soil is \_\_\_\_\_ and has loose soil, so large trees can't grow in it.
- 4 When the water droplets in clouds become too heavy, it causes \_\_\_\_\_.

#### (B) Mention two examples of natural changes that cause habitat destruction.

## 4 Giza – 6<sup>th</sup> October Directorate

### Q1. (A) Write the scientific term:

- 1 It's a form of evaporation that takes place through the stomata in plants leaves. ( )
- 2 It's the dark soil that can retain large amounts of water. ( )
- 3 It is the method by which the heat of the Sun transfers from space to Earth. ( )
- 4 They are the factors that include living organisms in an ecosystem. ( )

### (B) What happens to:

Air density as we move down towards the bottom of a mountain?

### Q2. (A) Choose the correct answer:

- 1 The increase in the amount of rain may cause \_\_\_\_\_.  
 a. drought      b. sandstorms      c. dust storms      d. flooding
- 2 Poison dart frogs live in \_\_\_\_\_ environments.  
 a. Arctic      b. tropical rainforest  
 c. desert      d. Antarctic
- 3 All the following are inherited traits in humans, except the \_\_\_\_\_.  
 a. fur color      b. eye color      c. nose color      d. ear shape
- 4 A rain shadow is an area that is formed behind \_\_\_\_\_.  
 a. trees      b. buildings      c. mountains      d. bridges

### (B) Correct the underlined word:

- 1 The measure of how much water vapor is present in the air is called meteorology. ( )

### Q3. (A) Put (✓) or (x):

- 1 The force of gravity affects the movement of water in the water cycle. ( )
- 2 The weight of air above a certain area is known as temperature. ( )
- 3 Offsprings receive their environmental factors from their parents. ( )
- 4 Soil is important for animals only. ( )

(B) Give a reason for: Birds migrate from one place to another.



5

## Giza – Ossim Directorate

Q1. (A) Complete the following sentences using these words below:

(worms – genes – insects – soil)

- 1 From living organisms that live in soil are \_\_\_\_\_ and \_\_\_\_\_.
- 2 \_\_\_\_\_ are tiny structures found in the nucleus of cells of living organisms.
- 3 The thin layer which covers the Earth's crust is called \_\_\_\_\_.

(B) What happens if

- Water and light are not available?

Q2. (A) Choose from column (B) what suits it in column (A):

| Column (A)        | Column (B)                                  |
|-------------------|---------------------------------------------|
| 1 An anemometer   | a. measures the atmospheric pressure.       |
| 2 A weather radar | b. measures the wind speed.                 |
| 3 A rain gauge    | c. measures the intensity of precipitation. |
| 4 A barometer     | d. measures the amount of rain.             |

(B) Write the scientific term:

- They're the factors that include living organisms in an ecosystem. (\_\_\_\_\_)

Q3. (A) Choose the correct answer:

- 1 Clouds are formed due to the \_\_\_\_\_ process.  
a. melting      b. collection      c. condensation      d. freezing
- 2 When air is heated, its \_\_\_\_\_ changes.  
a. mass      b. smell      c. color      d. density
- 3 All the following are inherited traits in humans, except the \_\_\_\_\_.  
a. eye color      b. nose shape      c. fur color      d. ear shape
- 4 A rain shadow is an area that is formed behind a \_\_\_\_\_.  
a. tree      b. mountain      c. bridge      d. building

(B) Cross the odd word out:

Melting - Evaporation - Freezing - Collection

## 6 Alexandria – East Directorate

### Q1. (A) Complete the following sentences:

- 1 The sunlight, soil, temperature, and precipitation are examples of \_\_\_\_\_ factors.
- 2 The dry air forms a large area of \_\_\_\_\_ around the Earth.
- 3 The difference in air temperatures of areas that are close to each other affects the speed of \_\_\_\_\_ and air currents.
- 4 When water changes from a solid state to a liquid state, it \_\_\_\_\_ energy.

### (B) Give a reason for:

- 1 Plants in deserts are adapted to survive in extreme conditions.

### Q2. (A) Put (✓) or (x):

- 1 Environmental factors can affect the health and growth of man. ( )
- 2 The weather radar is used to measure the wind speed. ( )
- 3 Clouds are formed due to the melting process. ( )
- 4 The density of air decreases by increasing its temperature. ( )

### (B) What happens to:

- 1 The level of water in a lake when the evaporation rate increases?

### Q3. (A) Write the scientific term:

- 1 It is a type of soil that retains a medium amount of water and has medium pore spaces between its particles. (\_\_\_\_\_)
- 2 It is the science of studying and predicting the weather. (\_\_\_\_\_)
- 3 It is a change in the act of a living organism to help it survive. (\_\_\_\_\_)
- 4 It is a desert biome that has a cold temperature all year. (\_\_\_\_\_)

### (B) Cross out the odd word:

- Hurricanes - Floods - Building houses - Earthquakes (\_\_\_\_\_)



## 7 Alexandria – Al-Montazah (1) Directorate

1. (A) Choose the correct answer:

- The components that are not found in the soil include \_\_\_\_\_.
  - living organisms
  - minerals
  - water and air
  - sunlight
- The water vapor in the atmosphere can condense and form \_\_\_\_\_.
  - air
  - clouds
  - sunlight
  - wind
- The body structure of a polar bear that allows it to live in cold regions is considered \_\_\_\_\_.
  - a behavioral adaptation
  - a reproductive way
  - a structural adaptation
  - an environmental change
- The thermometer is used to \_\_\_\_\_.
  - measure the temperature
  - know tomorrow's weather
  - predict the time of rainfall
  - measure wind speed

**(B) Give a reason for:**

-  A shallow lake dries up in summer.

**Q2. (A) Put (✓) or (x):**

- 1 Abiotic factors affect the growth and the adaptation of biotic factors. ( )
- 2 The large salt lake in turkey dries up when the weather is cold. ( )
- 3 Soil is the home of some living organisms. ( )
- 4 Cold air rises above hotter air. ( )

**(B) What happens if:** Rain falls on a desert in suitable quantities?

**Q3. (A) Complete the following statements by using the words below:**

(density - convection - water and light - soil)

- 1 The photosynthesis process is affected by some environmental factors, such as: \_\_\_\_\_.
- 2 Heat is transferred through the atmosphere by \_\_\_\_\_.
- 3 \_\_\_\_\_ is the loose layer which covers the Earth's crust.
- 4 Cold water has more \_\_\_\_\_ than warm water.

**(B) Write the scientific term:**

- It contains biotic factors and abiotic factors that interact with each other.

**Q1. (A) Complete the following sentences:**

(heat – water – condensation – humidity)

- 1 Formation of fog is due to the \_\_\_\_\_ of water vapor.
- 2 Seawater absorbs \_\_\_\_\_ slowly.
- 3 Some desert plants have thick leaves to store \_\_\_\_\_.
- 4 \_\_\_\_\_ is the amount of water vapor in the air.

**(B) Give a reason for:**

- Hot air moves upward above cold air.

**Q2. (A) Correct the underlined words:**

- 1 Bird migration is an example of structural adaptation. (\_\_\_\_\_)
- 2 The least amount of rain falls on the rainforest biome. (\_\_\_\_\_)
- 3 Birman cat doesn't have any hair or have only very fine hair. (\_\_\_\_\_)
- 4 Meteorology is the process that helps living organisms to survive. (\_\_\_\_\_)

**(B) Write the scientific term:**

- It's the process in which matter changes from a liquid state to a gaseous state. (\_\_\_\_\_)

**Q3. (A) Choose from column [B] what suits it in column [A]:**

| Column (A)                              | Column (B)       |
|-----------------------------------------|------------------|
| 1 Falling of snow in an area            | a. runoff        |
| 2 Flowing of river's water into a sea   | b. barometer     |
| 3 It measures wind speed.               | c. precipitation |
| 4 It measures the atmospheric pressure. | d. anemometer    |

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_

**(B) Cross out the odd word:**

Deposition – Melting – Erosion – Weathering (\_\_\_\_\_)



## 9 Alexandria – Middle Directorate

### Q1. (A) Choose the correct answer:

- 1 All the following are water reservoirs, except \_\_\_\_\_.  
 a. seas  
 b. glaciers  
 c. the moon  
 d. living organisms
- 2 Heat transfers by convection in \_\_\_\_\_ and \_\_\_\_\_.  
 a. liquids - gases  
 b. gases - solids  
 c. solids - liquids  
 d. liquids - space
- 3 Silt soil contains \_\_\_\_\_ particles and its color is \_\_\_\_\_.  
 a. large - yellow    b. large - dark    c. medium - dark    d. medium - gray
- 4 Dorcas gazelles live in \_\_\_\_\_.  
 a. tropical areas    b. desert areas    c. the North Pole    d. the South Pole

(B) Give a reason for: The poison dart frog has colorful, poisonous skin.

### Q2. (A) Put (✓) or (x):

- 1 Birds migrate to areas that have no food. ( )
- 2 There is a very large amount of rain in the desert. ( )
- 3 Birman cats have very long silky hair. ( )
- 4 Precipitation occurs after condensation of water vapor in the sky. ( )

### (B) Mention the importance of:

Barometer: \_\_\_\_\_

### Q3. (A) Complete the sentences by using the following words:

(soil - shorter - minerals - drought)

- 1 At noon, sand gets hot in a \_\_\_\_\_ time than water.
- 2 The building units of rocks are \_\_\_\_\_.
- 3 Extreme hot temperatures may cause \_\_\_\_\_.
- 4 \_\_\_\_\_ is the loose layer that covers the Earth's crust.

### (B) Correct the underlined word:

- Light is from the biotic factors in an ecosystem. (\_\_\_\_\_)

## 10 Qalyubia – Banha Directorate

### Q1. (A) Choose the correct answer:

- In \_\_\_\_\_ regions, the rate of evaporation would be the highest.  
a. moderate      b. hot      c. cool      d. polar
- The density of hot, humid air is \_\_\_\_\_ that of cold, dry air.  
a. more than      b. less than      c. equal to      d. similar to
- All the following are from the abiotic factors in an ecosystem, except \_\_\_\_\_.  
a. air      b. sunlight      c. water      d. plants
- The organic materials which are found in the soil include \_\_\_\_\_.  
a. air      b. water      c. rocks      d. humus

### (B) Mention the function of: Barometer: \_\_\_\_\_

### Q2. (A) Complete the following sentences:

- Water can be pulled downward by \_\_\_\_\_ force.
- Extreme hot temperatures in an area for long time may cause \_\_\_\_\_.
- A \_\_\_\_\_ cat has long, silky hair, while a \_\_\_\_\_ cat doesn't have any hair or may have fine hair.
- Clay soil can retain more amount of water, while \_\_\_\_\_ can retain a small amount of water.

### (B) Classify the following into air current or wind:

- Vertical movement of air
- Horizontal movement of air

### Q3. (A) Put (✓) or (X):

- Runoff is the step in which water flows along the Earth's surface into a river, and then into the ocean or sea. ( )
- From the factors that determine the wind direction is the amount of solar radiation that reaches the Earth. ( )
- Bird migration is an example of physical adaptation. ( )
- Desertification is a process by which land becomes more fertile. ( )

### (B) Arrange the following according to the size of particles in an ascending order:

(Sand soil – Clay soil – Silt soil)



# 11 Kafr El-Sheikh – Educational Directorate

## Q1. (A) Choose the correct answer:

- 1 The \_\_\_\_\_ is used to measure the current atmospheric pressure.  
a. anemometer      b. barometer      c. thermometer      d. rain gauge
- 2 All the following are considered carnivores, except \_\_\_\_\_.  
a. wolves      b. caribous      c. leopards      d. lions
- 3 \_\_\_\_\_ causes the falling of ice in glaciers from a higher altitude to a lower altitude.  
a. Convection      b. Sunlight      c. Gravity      d. Wind
- 4 A \_\_\_\_\_ occurs when strong winds blow up sand from dry areas, such as deserts.  
a. drought      b. desertification      c. flood      d. sandstorm

**(B) Write the scientific term:** They are the building units of rocks.

## Q2. (A) Put (✓) or (x):

- 1 The lionfish is a native species in the Red Sea areas. ( )
- 2 Clay soil retains more water than sand soil. ( )
- 3 The African penguin has thick blubber and dense feathers to keep its body warm. ( )
- 4 The Sphinx cat doesn't have the genetic factor for long, silky hair. ( )

## (B) Give a reason for:

Some plants that live in the desert ecosystem have long roots.

## Q3. (A) Complete the following sentences with the words between the brackets:

(evaporation - condensation - humidity - genes)

- 1 The \_\_\_\_\_ carry inherited traits from the parents to their offsprings.
- 2 Transpiration is a type of \_\_\_\_\_ in plants.
- 3 In the early morning, a fog is formed on a field as a result of the \_\_\_\_\_ process.
- 4 The amount of water vapor present in the atmosphere is called \_\_\_\_\_.

**(B) What happens when:** Air near Earth's surface is warmed?

## 12 Ismailia – Educational Directorate

### Q1. (A) Choose the correct answer:

- Humus are \_\_\_\_\_.  
 a. components resulting from decomposition  
 b. fine and inorganic rocks  
 c. large particles of metals  
 d. rocks from which soil particles break down
- The amount of water vapor in the air is known as \_\_\_\_\_.  
 a. humidity  
 b. evaporation  
 c. condensation  
 d. the clouds
- Coastal mountains ranges often have two sides, which are ..... side and ..... side.  
 a. narrow - wide  
 b. wet - dry  
 c. high - low  
 d. dark - dry
- The bog ecosystem has ..... soil.  
 a. sand  
 b. gravel  
 c. clay  
 d. silt

### (B) What happens to:

- The plants in an ecosystem if they receive too intense light?

### Q2. (A) Put (✓) or (x):

- The weather of the area near the equator is very cold. ( )
- There is no Sphinx cat that has long hair like a Birman cat. ( )
- Sandstorms blow up sand from dry areas, such as seas and oceans. ( )
- Precipitation occurs after condensation of water vapor in the sky. ( )

(B) Give a reason for: The process of desertification has increased recently.

### Q3. (A) Write the scientific term:

- They are the distances between the particles of the soil. (\_\_\_\_\_)
- They are responsible for determining the body features and are present in the cell nucleus. (\_\_\_\_\_)
- It is the process which breaks down rocks into small particles. (\_\_\_\_\_)
- It is formed from millions of tiny water droplets which are condensed from water vapor in the sky. (\_\_\_\_\_)

### (B) Look at the opposite figure, then choose the correct answer:

- The process which takes place in this figure is considered a form of \_\_\_\_\_ process.

- a. condensation    b. evaporation    c. precipitation    d. collection



# 13 Gharbia – Educational Directorate

## Q1. (A) Complete the following sentences:

- Hot air rises up as it has \_\_\_\_\_ density than cold air.
- The way your ear lobes hang is a trait controlled by \_\_\_\_\_ that are found in the cell nucleus.
- Transpiration is a form of the \_\_\_\_\_ process.
- During rainfall, the soil of humid areas retains \_\_\_\_\_ amount of water.

**(B) Give a reason for:** Sandstorms have harmful effects on human health.

## Q2. (A) Write the scientific term:

- It is the main source of energy that affects the water cycle. (\_\_\_\_\_)
- It contains biotic factors and abiotic factors that interact with each other. (\_\_\_\_\_)
- It is a side of mountain ranges at coastal regions that faces the coast. (\_\_\_\_\_)
- They are the spaces between the soil particles. (\_\_\_\_\_)

## (B) What happens to:

- The level of water in a lake, when the rate of evaporation increases?

## Q3. (A) Choose the correct answer:

- Leakage of water into groundwater reservoirs is due to the action of \_\_\_\_\_.  
a. condensation    b. gravity    c. precipitation    d. evaporation
- Wind is produced by the help of \_\_\_\_\_.  
a. water turbines    b. electric generator  
c. solar radiation    d. electric motor
- Poison dart frogs live in the \_\_\_\_\_ environment.  
a. Arctic    b. Antarctic  
c. desert    d. tropical rainforest
- The change in climate leads to the \_\_\_\_\_ of some living organisms that can't adapt.  
a. increase    b. extinction    c. reproduction    d. growing

## (B) Compare between sand soil and clay soil according to the size of particles:

| Type of Soil          | Sand Soil | Clay Soil |
|-----------------------|-----------|-----------|
| The Size of Particles | _____     | _____     |

**14 Al-Azhar – Educational Directorate**

**Q1. Choose the correct answer:**

- 1 The transfer of genetic factors happen in \_\_\_\_\_.  
**a.** humans only  
**b.** animals only  
**c.** humans and animals  
**d.** humans, animals, and plants
- 2 All the following instruments are used to measure weather conditions, except \_\_\_\_\_.  
**a.** anemometers  
**b.** weather balloons  
**c.** weather radars  
**d.** barometers
- 3 Migration of animals to search for food is considered \_\_\_\_\_.  
**a.** a type of structural adaptation only  
**b.** a type of behavioral adaptation only  
**c.** structural and behavioral adaptations  
**d.** a way to find predators
- 4 All the following are flooding damages, except \_\_\_\_\_.  
**a.** reducing visibility  
**b.** drowning of livestock and people  
**c.** disrupting life and economies  
**d.** buildings damage
- 5 \_\_\_\_\_ can be used to power farms in desert areas.  
**a.** Water turbines only  
**b.** Solar energy and wind turbines  
**c.** Wind turbines only  
**d.** Solar energy only

**Q2. (A) Compare between:**

- Changes in the factors affecting weather (the air temperature – the atmospheric pressure, the air density) at the top and the bottom of a mountain.

| P.O.C                | At the bottom of a mountain | At the top of a mountain |
|----------------------|-----------------------------|--------------------------|
| Air Temperature      |                             |                          |
| Atmospheric Pressure |                             |                          |
| Air Density          |                             |                          |



**(B) Use the following words to label each example with the correct process or step of the water cycle:**

(condensation - evaporation - runoff)

- 1 A shallow river dries up.
- 2 A fog is formed over a field in the morning.
- 3 The water in a river travels down a mountain side and into the sea.

**Q3. (A) Write the scientific term:**

- 1 It is the loose layer that covers the Earth's surface. (\_\_\_\_\_)
- 2 It is the science of studying and predicting the weather. (\_\_\_\_\_)

**(B) Give reasons for:**

- 1 About 10% of the water vapor in air comes from plants.
- 2 The area near the equator is very hot.
- 3 Decomposers have an important role in the formation of soil.

**Q4. Put (✓) or (x):**

- 1 Type of soil differ in their color and their ability to hold water. ( )
- 2 A Sphynx cat doesn't have any hair or may have only very fine hair. ( )
- 3 A rain shadow is an area that is formed behind trees. ( )
- 4 Solar energy and wind are the main factors that affect the water cycle. ( )
- 5 Oceans help improve the world's climate through water storage. ( )

**Q5. (A) Correct the underlined words:**

- 1 The heat of the Sun transfers through space to Earth's atmosphere by convection. (\_\_\_\_\_)
- 2 The main factors that move water among a storage location of water on Earth involve condensation and precipitation. (\_\_\_\_\_)

**(B) Complete the following sentences using the words below:**

(Wind - solar - water vapor - rain - density)

- 1 The amount of \_\_\_\_\_ energy that reaches the Earth affects in rate evaporation in the water cycle.
- 2 Cold water has more \_\_\_\_\_ than warm water, so it moves under the warm water.
- 3 When warm air contains enough water vapor, it loses this water in the form of \_\_\_\_\_.



## 15 Port Said – Educational Directorate

**Q1. (A) Put (✓) or (x):**

- 1 In the water cycle, the step that follows the condensation process is runoff. ( )
- 2 The sand absorbs heat slower than water during the daytime. ( )
- 3 Genes carry inherited traits from the parents to their offspring. ( )
- 4 All types of soil are similar in color and texture. ( )

**(B) Give a reason for:** Sandstorms have harmful effects on human health.

**Q2. (A) Complete the following statements by using the words below:**

(structural – deserts – chemical fertilizers – meteorologist)

- 1 Dry air causes the formation of large areas of \_\_\_\_\_ around the Earth's surface.
- 2 The scientist who studies the Earth's atmosphere is called a \_\_\_\_\_.
- 3 Thick fur is an example of \_\_\_\_\_ adaptation for animals that live in polar climates.
- 4 The overuse of \_\_\_\_\_ causes depletion of the soil.

**(B) What happens:**

- To the density of air if the cold air is warmed by the effect of solar energy?

**Q3. (A) Choose the correct answer:**

- 1 The anemometer is used to measure \_\_\_\_\_.  
**a.** rainfall  
**b.** wind speed  
**c.** temperature  
**d.** atmospheric pressure
- 2 The evaporation of water from plants leaves is called \_\_\_\_\_.  
**a.** condensation  
**b.** transpiration  
**c.** collection  
**d.** respiration
- 3 Soil with large spaces between its particle is characterized by the ability to allow water to flow through it \_\_\_\_\_ and retain it \_\_\_\_\_.  
**a.** slowly - well  
**b.** quickly - well  
**c.** quickly - poorly  
**d.** slowly - poorly
- 4 Which of the following are the abiotic components of soil?  
**a.** Decomposers, plants, and decomposing materials  
**b.** Rocks, air, and water  
**c.** Plants, rocks, and air  
**d.** Decomposers, air, and water

**(B) Cross out the odd word:**

Hurricanes - Volcanic eruptions - Removing forests to build houses - Forests fires

## Government Exams Model Answers

### 1 Cairo - Al-Masara Directorate

**Q1: (A)** 1 d 2 b 3 a 4 b

(B) Due to the condensation of the water vapor in the air into water droplets.

**Q2: (A)** 1 x 2 x 3 ✓ 4 x

(B) It disrupts their power and stops generating energy.

**Q3: (A)** 1 Soil 2 Minerals  
3 Wet side 4 Deserts.

(B) Collection

### 2 Cairo - Ain Shams Directorate

**Q1: (A)** 1 c 2 b 3 b 4 d

(B) The atmospheric pressure decreases.

**Q2: (A)** 1 x 2 x 3 ✓ 4 x

(B) Transpiration process

**Q3: (A)** 1 c 2 a 3 b 4 d

(B)

| P.O.C             | Sand Soil | Silt Soil | Clay Soil |
|-------------------|-----------|-----------|-----------|
| Size of Particles | Large     | Medium    | Small     |

### 3 Cairo - Al-Zayton Directorate

**Q1: (A)** 1 b 2 b 3 b 4 a

(B) The air density increases.

**Q2: (A)** 1 x 2 x 3 x 4 x



(B) Barometer

- Q3: (A)** 1 gravity 2 light  
3 dry  
4 precipitation

(B) Fires - Floods - Hurricanes

#### 4 Giza - 6<sup>th</sup> October Directorate

- Q1: (A)** 1 Transpiration process  
2 Clay soil 3 Radiation  
4 Biotic factors

(B) The air density increases.

- Q2: (A)** 1 d 2 b 3 a 4 c

(B) humidity.

- Q3: (A)** 1 ✓ 2 x 3 x 4 x

(B) To search for food and suitable habitat conditions to reproduce.

#### 5 Giza - Ossim Directorate

- Q1: (A)** 1 worms - insects  
2 Genes 3 soil

(B) Living organisms can't survive and they die.

- Q2: (A)** 1 b 2 c 3 d 4 a

(B) Biotic factors

- Q3: (A)** 1 c 2 d 3 c 4 b

(B) Collection

#### 6 Alexandria - East Directorate

- Q1: (A)** 1 abiotic 2 deserts  
3 wind 4 gains

(B) Because they get some genetic

factors from their parents that help them adapt to the extreme conditions.

- Q2: (A)** 1 ✓ 2 x 3 x 4 ✓

(B) The level of water in this lake decreases.

- Q3: (A)** 1 ilt soil  
2 Meteorology  
3 Behavioral adaptation  
4 Antarctica

(B) Building houses

#### 7 Alexandria - Al-Montazah (1) Directorate

- Q1: (A)** 1 d 2 b 3 c 4 a

(B) Due to the increase in the rate of evaporation of lake water due to gaining energy.

- Q2: (A)** 1 ✓ 2 x 3 ✓ 4 x

(B) Farming in the desert will not be difficult, and the soil will be fertile and fruitful.

- Q3: (A)** 1 water and light  
2 convection 3 Soil  
4 density

(B) Ecosystem

#### 8 Alexandria - Al-Montazah (2) Directorate

- Q1: (A)** 1 condensation  
2 heat 3 water  
4 Humidity

(B) Because hot air has less density



## Model Answers

than cold air.

- Q2: (A)** 1 behavioral 2 desert  
3 Sphynx 4 Adaptation

(B) Evaporation process

- Q3: (A)** 1 c 2 a 3 d 4 b

(B) Melting

### 9 Alexandria – Middle Directorate

- Q1: (A)** 1 c 2 a 3 d 4 b

(B) To protect itself from predators.

- Q2: (A)** 1 X 2 X 3 ✓ 4 ✓

(B) It is used to measure the atmospheric pressure.

- Q3: (A)** 1 shorter 2 minerals  
3 drought 4 Soil

(B) - abiotic

### 10 Qalyubia – Banha Directorate

- Q1: (A)** 1 b 2 b 3 d 4 d

(B) It is used to measure the atmospheric pressure.

- Q2: (A)** 1 gravity 2 drought  
3 Birman – Sphynx  
4 sand

(B) 1 Air current 2 Wind

- Q3: (A)** 1 ✓ 2 ✓ 3 X 4 X

(B) Clay soil – Silt soil – Sand soil

### 11 Kafr El-Sheikh – Educational Directorate

- Q1: (A)** 1 b 2 b 3 c 4 d

(B) Minerals

- Q2: (A)** 1 X 2 ✓ 3 X 4 ✓

(B) To get the deep groundwater.

- Q3: (A)** 1 genes

2 evaporation

3 condensation

4 humidity

(B) It expands and becomes less dense, so it rises upward above cold air.

### 12 Ismailia – Educational Directorate

- Q1: (A)** 1 a 2 a 3 b 4 c

(B) The plants' parts may be damaged, which causes their drying or burning.

- Q2: (A)** 1 X 2 ✓ 3 X 4 ✓

(B) Due to deforestation, drought, or overgrazing.

- Q3: (A)** 1 pore spaces 2 Genes  
3 Weathering 4 Cloud

(B) b

### 13 Gharbia – Educational Directorate

- Q1: (A)** 1 less 2 genes  
3 evaporation 4 large

(B) Because the dust of sandstorms harms the humans' eyes and respiratory system.

- Q2: (A)** 1 The Sun 2 Ecosystem

3 Wet side

4 Pores spaces

(B) The level of water decreases.

Q3: (A) 1 b 2 c 3 d 4 b

(B)

| Type of Soil          | Sand Soil | Clay Soil |
|-----------------------|-----------|-----------|
| The Size of Particles | Large     | Small     |

#### 14 Al-Azhar – Educational Directorate

Q1: 1 d 2 b 3 b

4 a 5 b

Q2: (A)

| P.O.C                | 1 At the bottom of a mountain | 2 At the top of a mountain |
|----------------------|-------------------------------|----------------------------|
| Air Temperature      | High                          | Low                        |
| Atmospheric Pressure | High                          | Low                        |
| Air Density          | High                          | Low                        |

- (B) 1 Evaporation  
2 Condensation  
3 Runoff

Q3: (A) 1 soil

2 Meteorology

- (B) 1 Due to the transpiration process that occurs through the stomata found on the plants' leaves.  
2 Because the sun rays fall perpendicular on this area, so the rays are concentrated on a small area.  
3 Because they recycle the nutrients found in the remains of dead plants and animals back to the soil.

Q4: (A) 1 ✓ 2 ✓ 3 x 4 ✓  
5 ✓

Q5: (A) 1 radiation  
2 wind and gravity

(B) 1 solar 2 density  
3 rain

#### 15 Port Said – Educational Directorate

Q1: (A) 1 x 2 x 3 ✓ 4 x

(B) Because the dust of sandstorms harms the humans' eyes and respiratory system.

Q2: (A) 1 deserts  
2 meteorologist  
3 structural  
4 chemical fertilizers

(B) The density of air decreases.

Q3: (A) 1 b 2 b 3 c 4 b

(B) Removing forests to build houses



حمل الآن

مجانا وحصريا

# امتحانات رقم (5)

## الترم الثاني





|                                                                                                                                                                                                   |                                                                                                                          |                                                                                                       |                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Model Exam</b><br> <b>1</b>  | <b>Dakahlia Governorate Educational Directorate</b><br>الصف السادس الابتدائي / 2026 / مايو / 2026<br>Dr Michael Guirguis | <b>Science Primary Six</b><br>2 <sup>nd</sup> Term May 2026<br>((الاجابة في نفس الورقة / صفحة واحدة)) | <b>Time : 1 1/2 Hours</b><br>نموذج امتحان الفصل الدراسي الثاني / مايو / 2026 / الصف السادس الابتدائي |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|

ورقة و قلم في السانيس

**Answer each of the following questions**

**First Question : -**

**Complete the following sentences:**

- 1- The two basic factors for water cycle are **gravity** and **heat energy**  
 2- Water state changes in water cycle by **losing** and **gaining** energy.

**What happens when:**

- 1- The poison dart frog doesn't have big eyes.

It can't adapt and survive as it can't see its predators and preys so it will be easily hunted and hardly find food

- 2- Lack of light for plant growth

It will affect plant growth because light intensity and duration determine whether it will grow well or not

**Put ( √ ) or ( X ):**

- 1-Sands lose its heat slower than water

**X**

**Second Question : -**

**Explain the meaning of each of the following:**

- 1- Transpiration: ... Evaporation from plant leaves and share with 10% of water vapor in air  
 2- Soil pores: ..... Spaces between the particles in soil filled with air or water .....

**Read the following statements then correct the incorrect ones:**

- 1- Evaporation is the process of water changing from a liquid state to a gaseous state.

**Correct**

- 2- Runoff is the flow of water beneath the Earth's surface after precipitation. **groundwater**

**X**

**Answer the following questions:**

- 1- What is the consequence of: Increasing evaporation of lake water.

The lake water level drops and may dry up



## 2- How do environmental factors affect the growth of living organisms?

Abiotic factors like sunlight, water, temperature, and soil influence survival, growth, and adaptations of organisms

### Third Question :-

Complete the following sentences:

1- Air is considered one of the ... **abiotic** factors.

2- Palm trees are adapted to **the arid conditions** in the desert.

Write what the following statement indicate:

1- A process that causes entering water to the atmosphere in a form of water vapor. ( **Evaporation** )

2- A process by which plants get rid of excess water in the form of water vapor through stomata. ( **Transpiration** )

Choose the right answer:

1. **water** loses heat slowly. ( sand - water )

### Fourth Question :-

Explain the scientific reason:

1- Living organisms are considered from reservoir on the Earth's

Because living organisms have water in its body and water moves in and out of them

2- Water and ice crystals are returned to Earth by clouds.

As rain, snow, sleet, or hail condensates and becomes heavy it pulled down by the force of gravity

3- Plants manage to adapt to warm and dry climates?

These plants are usually small, wiry and often have small, leathery leaves; long shallow roots to draw any available water; prickles or thorns to keep away herbivores; and thick stems and leaves to store water

Put (✓) or (X):

1- Minerals are organic ingredients in the soil.

( X )

Choose the right answer:

1- All of the following behavioral adaptations except .....

(Migration – Living in burrows – **thorns on the leaves of some plant**

– the plant's growth towards light)

=====  
**thorns on the leaves of some plant**



Dr Michael Guirguis

Answer each of the following questions

First Question :-

Complete the following sentences:

- 1- The ..... gravity ..... causes water to seep into the ground.
- 2- The processes that require the gaining of energy by water molecules in reservoir are . evaporation and melting

What happens when:

- 1- The Arctic fox does not have a thick fur

It will not survive the cold climate as thick fur keep it warm in polar region

- 2- A plant is exposed to intense sunlight for long periods?

Light that is too intense can damage plant parts and cause drying or burning

Put ( √ ) or ( X ):

- 1- The barometer is used in determine air pressure.

Second Question :-

Explain the meaning of each of the following:

- 1- Condensation Process of water vapor cooling and changing into liquid water droplets
- 2- Genetic traits: ..... Traits that living organisms get from their parent plants or animals and are transmitted genetically

Read the following statement

- 1- The oceans are the main source of evaporation in the water cycle.

Correct

- 2- Climate change does not affect the water cycle.

X

affect

Answer the following questions:

- 1- What is the relationship between convection and condensation?

Dr Michael Guirguis

ورقة و قلم في السانيس

Condensation is the process that forms clouds when water vapor cools

Convection Heat transfer that happens when hotter. less dense particles rise and cooler. denser particles sink

- 2- Mention the different environmental factors that help living organisms to grow?

They are the abiotic factors which are nonliving factors such as sunlight, air, soil, water availability, precipitation, and temperature



=====

### Third Question : -

#### Complete the following sentences:

- 1- Fish migration is considered one of the ..... adaptations. behavioral
- 2- Environmental factors that affect a living organism include ..... and ..... sunlight water

#### Write what the following statement indicate:

- 1- It happens when the water droplets that make up clouds become heavier and fall due to gravity. (.. Precipitation ..)
- 2- The changing of liquid into gas is a result of gaining heat energy (.. Evaporation ..)

#### Choose the right answer:

1. The ..... is used to determine air pressure. ( anemometer - barometer ) barometer
- =====

### Fourth Question : -

#### Explain the scientific reason:

- 1- How can the Dorcas gazelle camouflage in the desert?

It has a color of fur ( sandy) which helps it to be easily camouflaged in the environment

- 2- Bird migration?

to find the best resources for successful breeding, different food sources, or suitable homelands at different times of the year

- 3- The rareness of the precipitation of the rainfall in the deserts.

Deserts receive about 250 millimeters of rain per year, the least amount of rain of all the biomes and also the air in the desert is dry, so it loses its water vapor so less condensation

#### Put ( √ ) or ( X ):

- 1- Genetic factors help the Dorcas gazelle to withstand high temperatures. (√)

#### Choose the right answer:

- 1- All of the following are structural adaptations except ..... (size of plant leaves direction of plant growth - thorns on plant leaves - length of stem)

direction of plant growth

=====



**Model Exam**

Dakahlia Governorate  
Educational Directorate

Science Primary Six  
2<sup>nd</sup> Term May 2026

Time : 1 1/2 Hours

نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي

Dr Michael Guirguis (الاجابة في نفس الورقة / صفحة واحدة)

ورقة و قلم في السبائس



**Answer each of the following questions**

**First Question : -**

**Complete the following sentences:**

1- The **water cycle** works to transfer energy between reservoirs on the Earth's surface.

2- There are three main stages that make up the water cycle **evaporation**

**condensation and precipitation**

**What happens when:**

1- A green plant is placed away from the source of sunlight. (in terms of growth direction)

The plant grows toward light as it is one of the Behavioral adaptations of plants to promote survival

2- Healthcare services are not available in some places. ورقة و

It affects human health and growth as it might be unsafe, or water may be far away or unsafe to drink. Food can be hard to come by, and sanitation can be lacking, which can lead to the spread of diseases

1- The spinning of the paper spirals over a turned – off lamp indicates the occurrence of convection currents **X**

**Second Question : -**

**Choose the right answer:**

1. Warm air molecules move **upward** . **upward** downward )

**Explain the meaning of each of the following:**

1- Evaporation: Process of heated liquid water changing to water vapor

Dr Michael Guirguis  
ورقة و قلم في السبائس

2- Humus: Nutrient-rich components from broken down organic matter that help plants

**Read the following statements then correct the incorrect ones:**

1- Wind transfers energy between reservoirs on the Earth's surface.

2- Evaporation occurs as a result of the gaining of heat energy, **water cycle**

**Answer the following questions:**

**Correct**

1- Explain the importance of convection.

Convection helps form clouds, winds, and ocean currents and plays a role in regional climates



### Third Question :-

Complete the following sentences:

1- **Structural** adaptations of a living organism are related to its body structure.

2- The thorns on the stems of some plants are considered **Structural** adaptation

Write what the following statement indicate:

1- The weight of the air above a location.

**Atmospheric pressure**

2. The amount of water vapor present in the air. (.. **Humidity** ..)

Put (  $\checkmark$  ) or ( X ):

1- Height and skin color are considered abiotic factors that affect human life. **X**

=====

### Fourth Question :-

Explain the scientific reason:

1- The occurrence of the evaporation process.

.....

2- The temperatures are different around the world.

Sun rays are more direct at the equator, focusing energy on a smaller area and making it hotter. Toward the poles, the rays hit at a slant, spreading the same energy over a larger area, so it feels cooler.

3- Birds migrate at different times of the year?

To find the best resources for successful breeding, different food sources, or suitable homelands

Because water gains heat energy from the sun and the particles increases in movement and spaced increase and change from its liquid state to gaseous state

Choose the right answer:

1- All of the following lifestyles except ..... (smoking - **healthcare services** - food system - practice the sports)

**healthcare services**

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ورقة و قلم في السايانس

Answer the following questions:

1- Compare the Sphynx cat and the Birman cat in terms of:

Hair..... **Sphynx: hairless or very fine hair.** **Birman: long, silky hair.**

Genre **Both are Felis catus**

=====

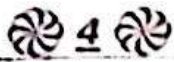
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ورقة و قلم في السايانس

6



**Model Exam**



Dakahlia Governorate | Science Primary Six | Educational Directorate | 2<sup>nd</sup> Term May 2026

Time : 1 1/2 Hours

تمويل امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي  
(الإجابة في نفس الورقة / صفحة واحدة)

# Science

Answer each of the following questions

First Question : -

Complete the following sentences:

1- Evaporation is the change of the ..  state to the  state.

2- The transpiration rate represents  % of the ratio of water vapor in the air.

What happens when:

1- The temperature rises relative to the soil,

2- Animal manure is added to the soil.

It adds back nutrients that have been depleted and helps restore soil health .....

Put ( √ ) or ( X ):

1- Water  heat slower than sands ☒

Second Question : -

Choose the right answer:

Organisms like

Humidity

1- A is used to determine wind speed.

a- anemometer b- barometer c- radar d- thermometer

Explain the meaning of each of the following:

**Convection:** Heat transfer that happens when hotter, less dense particles rise and cooler, denser particles sink

**Decomposer:** Organisms like bacteria, fungi, and earthworms that break down dead plants and animals into nutrient-rich components

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Read the following statements then correct the incorrect one

1- Small lakes dry up as a result of precipitation.

2- Condensation occurs when a gas is heated and turns into a liquid.

Answer the following questions:

1- Explain the role of the gravity in water cycle in nature.

Gravity causes water, ice, and glaciers to move from higher elevations to lower elevations, and pulls precipitation downward



### Third Question :-

Complete the following sentences:

1- The leaves of plants in the Western Desert are

small, leathery

2- The **Climate change** is considered one of the reasons for birds returning to their habitat

Write what the following statement indicate:

1- The science of studying and predicting the weather.

**Meteorology**

2- A scientist that uses a variety of tools and instruments to study and forecast weather. (..... **Meteorologist** .....)

Put (✓) or (X):

1- All the soil ingredients can be seen.

**X**

### Fourth Question :-

Explain the scientific reason:

1- Dry air forms deserts.

Because it loses all water vapor in it so descending dry air can help create belts of deserts.

2- The regions near the two poles are very cold.

Because sun rays hit at a slant, spreading the same energy over a larger area, so it feels cooler

3- Some plants have long roots?

To reach the needed groundwater in desert

4- The length and texture of cats' hair vary for the same breed.

Because genetic factors control what traits get passed down from parent to offspring

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ورقة و قلم في السانيس

Choose the right answer:

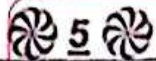
1- Each of the following factors lead to soil depletion except ...

(Overgrazing, - chemical fertilizers – deforestation - **decompos organisms**)

**decompos organisms**



|                                                                       |                         |                               |                       |
|-----------------------------------------------------------------------|-------------------------|-------------------------------|-----------------------|
| Model Exam                                                            | Dakahlia Governorate    | Science Primary Six           | Time : 1½ Hours       |
|                                                                       | Educational Directorate | 2 <sup>ND</sup> Term May 2026 | توجيه عام العلوم لغات |
| نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي |                         |                               |                       |
| Dr Michael Guirguis ((الاجابة في نفس الورقة / صفحة واحدة))            |                         |                               |                       |



ورقة و فلم في السابنس

**Answer each of the following questions**

**First Question : -**

**Complete the following sentences:**

1- The ..... occurs when large numbers of water droplets combine together.

Precipitation

2- The water moves on Earth among ..... different reservoirs

**What happens when:**

1- The soil particles is large in size.

Sand soils drain water quickly and may not hold water well

2- Organisms if resources are scarce in an area?

They may not survive or may migrate, and habitat destruction can occur

**Put ( √ ) or ( X ):**

1- The anemometer is used in determine air pressure.

X

**Second Question : -**

**Choose the right answer:**

1- is the amount of water vapor present in the air.

c- Humidity

a- Air density

b- Atmospheric pressure

c- Humidity

d- Temperature

**Explain the meaning of each of the following**

1- Atmospheric Pressure: .....

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ورقة و فلم في السابنس

The amount of force that air exerts on its surroundings, or the weight of the air above a location

2- Soil: . A mixture of rock and mineral components, organic matter, air, and water

**Read the following statements then correct the incorrect ones:**

1- When the sun's rays are very slanted, we feel hotter.

cooler

water cycle

2- Convection currents in Earth's atmosphere help to determine the nature of regional climates. ✓

**Answer the following questions:**

1- Explain the role of the sun in wind movement.

ورقة و فلم في السابنس

The sun heats the air unevenly causing warm air to rise and cool air to sink, forming convection currents that create wind



### Third Question :-

Complete the following sentences:

Chrysanthemum plant grows when the day is shorter than the night.

2- Light is one of the .... abiotic ... factors.

Write what the following statement indicate:

1- A device that is used in measuring the atmospheric pressure.

Barometer

2- The science of studying and predicting weather.

Meteorology

Put ( √ ) or ( X ):

1- Soil fertility increases as the amount of organic matter in it increases. ☒

### Fourth Question :-

Explain the scientific reason:

1- The regions near the equator are very hot.

Because sun rays are more direct at the equator, focusing energy on a smaller area.

2- Some plants have short, extended roots near the earth's surface.

To catch even the smallest drop of dew or rain in deserts so it can survive and produce and adapt to Arid condition.

Choose the right answer:

1- Which of the following does not cause desertification of soil?

(Drought – Cutting down trees – regular irrigation – overgrazing)

regular irrigation

Answer the following questions:

1- Mention: the stages of predicting weather.

Gathering data, Collecting data, Analyzing the data, Putting it all together

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ورقة و قلم في المائتين

2- Identify the type of factor (genetic – environmental – lifestyle).

a- Smoking practice (lifestyle)

b- Availability of hospitals (environmental)

c- Length of hand fingers (genetic)

Science

Dr/Michael Guirguis



|                 |                                                                                                               |                                                      |                                             |
|-----------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------|
| Model Exam<br>6 | Dakahlia Governorate<br>Educational Directorate                                                               | Science Primary Six<br>2 <sup>ND</sup> Term May 2026 | Time : 1 1/2 Hours<br>توجيه عام العلوم لغات |
|                 | نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي<br>(الاجابة في نفس الورقة / صفحة واحدة) |                                                      |                                             |

Answer each of the following questions

First Question : -

Correct the following statement:

Migration is a structural adaptation as animals move from one place to another. **X** **Behavioral**

Give reason

1. The weather in the Arctic region is very cold.

Because toward the poles, the sun's rays hit at a slant, spreading the same energy over a larger area, so it feels cooler

2. Groundwater flows from high-altitude areas to low-altitude areas.

Gravity pulls water down through soil and rock layers until it reaches a layer it cannot pass through

3. Young rabbits resemble their parents.

Because genetic factors control what traits get passed down, or inherited, from parent to offspring

4. Decomposers play a crucial role in the ecological balance in the ecosystem.

Because decomposers break down the organic matter of dead organisms into nutrient-rich components called humus, which help plants grow

Second Question : - Write down what the phrase indicates:

The building units of rocks. **Minerals**

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ورقة وتم في السبب

Compare between

1. Evaporation and condensation by definition.

**Evaporation:** the process by which liquid water changes into water vapor.

**Condensation:** the process by which water vapor changes into liquid water

2. Thermometer and barometer.

**Thermometer** measures temperature

**barometer:** measures atmospheric pressure

3. Biotic and abiotic factors.

**Biotic factors** are the living parts of an ecosystem such as plants, animals, fungi, and bacteria.

4. Clay, soils and sandy soils in terms of water retention .

**Clay soils** hold water well and do not drain quickly.

**Sand soils** drain water quickly and do not hold water well

**Abiotic factors** are nonliving factors such as sunlight, air, soil, water availability, precipitation, and temperature



**Third Question : - Complete the following statements:**

1. factors such  and  are main factors for adaptation in a ~~biotic~~ community.

2. The young sphinx cat inherits a  trait from her father.

**What happens when:**

1. Heating liquid or gas.

2. The flow of water over the river bank and from there to the surrounding lands.

Flooding occurs and may damage the habitat and harm the living organisms

Meteorology

3. Follow a diet that contains a large amount of French fries and food drinks.

Meteorologist

It can have a very negative effect on our health and a big impact on our bodies

X

**Fourth Question : - Choose the correct answer:**

1-  is an important stopover for millions of migratory birds every year in Egypt.

b- Mediterranean Sea

c- Indian Ocean

d- Pacific Ocean

2-  has one of the most extreme environments on earth.

a- Rivers

c- Oceans

d- Coasts

**What are the consequences of:**

1. The sun's rays fall perpendicular to a small area.

The area receives more concentrated energy, so it feels hotter

2. The occurrence of long periods of dry weather with insufficient amounts of water available to humans, plants and animals.

Drought occurs and living organisms will be negatively affected

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ورقة و قلم في السانيس

3. The numbers of a particular organism in natural habitats are exaggerated.

It can lead to habitat destruction when resources are depleted

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Model Exam

Dakahlia Governorate  
Educational Directorate

Science Primary Six  
2<sup>nd</sup> Term May 2026

Time : 1 1/2 Hours

نموذج امتحان العلوم لطلاب

نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي  
Dr Michael Guirguis ((الاجابة في نفس الورقة / ملصقة واحدة))

ورقة و قلم في السبائس

Answer each of the following questions

First Question : -

Complete the following sentences:

evaporation

1- The water changes into vapor during the ..... process.

2- The cold ... air descends downwards.

What happens when:

1- Materials are burned under extremely high temperatures using large amounts of coal?

Air pollution occurs and it can harm human health and the environment

2- Organisms if resources are rare in an area?

..... one of those resources is depleted or taken away entirely, it is called habitat destruction. Animals may die or be forced to move to a new area

Put ( √ ) or ( X ):

1- The spinning of the paper spirals over a turned on lamp indicate the occurrence of convection currents

√

Second Question : -

Choose the right answer:

سفع او قاع

The density of air molecules increases at the of a mountain

a- summit

a- summit b- top c- slope d- midpoint

Explain the meaning of each of the following:

1- Barometer: An instrument that measures atmospheric pressure

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ورقة و قلم في السبائس

2- Adaptation: A characteristic that helps an organism survive in its environment

Read the following statements then correct the incorrect ones

1- The wind is formed by cold air rises up word then replaced by hot air .

Hot

2- Earth revolving is a reason for wind direction determination.

√

Answer the following questions:

1- Mention: The main stages of the weather forecasting process.

1. Collect data, 2. Analyze data, 3. Put it all together and Make predictions

13



### Third Question :-

#### Complete the following sentences:

- 1- The factors that affect the internal and external development of a human being are: **lifestyle** , **genetic** and .. **environment**
- 2- The Sphinx cat and the Berman cat belong to the ..... cat breed. **Felis catus**

#### Write what the following statement indicate:

- 1- The amount of force that air effects on the surrounding environment. **Atmospheric pressure**
- 2- Severe shortage of water available in an area. **Drought**

#### Put ( $\checkmark$ ) or ( X ):

- 1- All agricultural crops can be grown in the desert environment. **X**
- =====

### Fourth Question :-

#### Explain the scientific reason:

##### 1- Deserts formation.

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ورقة و فلم في السابيس

Because in some areas air sinks as it sink it warms and dries and no water vapor in it so less condensation and precipitation so desert is formed

##### 2- The type of soil vary from one environment to another.

Because soil is formed from the weathering of different rocks and from different amounts of organic matter, climate, and time

#### Choose the right answer.

- 1- Soil can be made healthy by using ... **natural fertilizers**
- (Pesticides - chemical fertilizers - **natural fertilizers** - burning of organic matter)

#### Answer the following questions:

##### 1- Mention: The importance of weather man.

1.allows meteorologists to see important patterns. 2. identify air masses and track how they are moving and interacting with each other. 3. communicate information to other meteorologists and the public

##### 2- What is the result of: Placing a green plant away from the source of sunlight. (in terms of growth direction)

The plant grows towards the light

ورقة و فلم في السابيس



Answer each of the following questions

First Question : - Complete the following sentences:

- 1- Tiny water droplets collect in the air to form a
- 2- The convection currents move in  direction
- 3- When we put a jar of hot water blue color on the top of a jar with cold water red color, the colors

Put ( √ ) or ( X ):

- 1- Flamingos migrate to a salt lake in Turkey, but it suddenly dries up. ☒

Choose the right answer:

- 1- One of the devices used to carry measuring instruments is the..  
a- thermometer ☒ b- weather balloons ☐  
c- rain gauge ☐ d- barometer ☐

Second Question : - What happens when:

- 1- Sunlight falls perpendicularly on the Earth's surface.

The perpendicular area focused on a smaller area so their effect is greater, so it feels hotter

- 2- The air near the Earth's surface is heated.

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When air is heated, its particles move faster and spread apart. This makes the air less dense, so it rises

Choose the right answer:

- 1- All the following is from Soil ingredients except ☒ c- glass  
(a) water (b) air (c) glass (d) organic matters

Read the following statements then correct the incorrect one:

- 1- Heat transfers from hot water to cold water. ☒
- 2- The volume of water pool increases by increasing the rainfall. ☒

Answer the following questions:

- 1- Mention: The importance of weather balloons?

carry instruments high into the atmosphere to measure temperature, pressure and humidity in different altitude to help forecast weather



### Third Question : - Complete the following sentences:

- 1- Genes found in the **nucleus** of the cell.
- 2- The survival of living organisms despite extreme conditions is related to the **adaptation** factors.

### Write what the following statement indicate:

- 1- Water level increases over the edge of riverbank and flows onto the lands around the river. **Flooding**
- 2- Very Strong winds blow up sand and dust from extremely dry area. **Sandstorm**

### Put ( √ ) or ( X ):

- 1- The shape and behavior of living organisms vary according to their habitat and the type of food they depend on. **√**

### Fourth Question : - Explain the scientific reason:

- 1- When hot air loses its heat, it descends downward.

Because when air cools, its particles move closer together, making the air more dense, so it sinks

- 2- Decomposers play an important role in the balance of the ecosystem.

Because decomposers break down the organic matter of dead organisms into nutrient-rich components called humus, which help plants grow

### Explain the meaning of each of the following:

- 1- Humidity: **The amount of water vapor in the air**

### Answer the following questions:

- 1- A farmer watches the rain falling in large amounts during this season and wanted to know the amount of rain . What is the tool is used for this?

**Rain gauge**

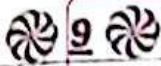
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- 2- Decomposing work in maintaining the balance of the ecosystem  
Explain that?

Decomposers break down the organic matter of dead organisms into nutrient-rich components called humus, which help plants grow and recycle nutrients in the ecosystem



**Model Exam**



Dakahla Governorate  
Educational Directorate

Science Primary Six  
2<sup>nd</sup> Term May 2026

Time : 1 1/2 Hours

نوعية عام العلوم لغات

نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي  
((الاجابة في نفس الورقة / صفحة واحدة))  
Dr Michael Guirguis

ورقة و قلم في السبيل

**Answer each of the following questions**

**First Question : -**

**What happens when:**

1- Increasing evaporation of the lake water.

The lake water turns into water vapor and the lake water level decreases.

2- Water on the Earth's surface when its temperature rises due to the sun?

It melts ice to produce liquid water and causes evaporation of liquid water to form water. Also the glaciers might melt suddenly cause flooding

**Choose the right answer:**

1- affects weather and climate.

a- d- All of the previous

a- Mountains

b- Soil type

c- Bodies of water

d- All of the previous

**Explain the meaning of each of the following:**

1- Meteorology:

The science of studying and predicting the weather.

**Read the following statements then correct the incorrect one**

1- The water cycle helps to maintain a stable water level on Earth. ✓

2- The convection currents moves horizontally. X vertically

**Second Question : -**

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**Complete the following sentences:**

1- The warm moist air is .. less .. dense

2- The cold gases are ... more .. dense than the warm gases

3- The descending dry air forms deserts.

**Choose the right answer:**

1- Chrysanthemums grow better in the season b) Winter

a) Spring (b) Winter (c) Autumn (d) Summer

**Read the following statements then correct the incorrect ones**



1- Fur color is considered a structural adaptation. ☒

2- The size of an organism's natural habitat does not affect its growth. ☐ affects

### Third Question :-

#### Explain the scientific reason:

1- Snow forms on the top of the mountain while the water remain liquid at the bottom.

Because the temperature is lower at the top of the mountain while at the bottom the temperature is higher so the water will be still in liquid state.

2- Meteorologists represent weather forecasts as probability ratio.

Because weather forecasts can be uncertain and conditions may change quickly and unpredictably like wind, air or ocean temperature, or humidity in the air

Put ( ☒ ) or ( ☐ )

1- Flamingos feed on algae found in freshwater lakes. ☐

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ورقة و قلم في السانيس

#### Answer the following questions:

1- What is the result of : The severe decreasing in temperature in some places (in the term of precipitation)

Snow forms when the air in the clouds is cold enough to allow ice crystals to form

2- Mention the importance of soil for plants.

Soil contains the food (nutrients), air, and water that plants need to grow.

### Fourth Question :-

#### Complete the following sentences:

1- fungi worms and insects from the biotic soil ingredients.

2- The clay soil particles is ..... smallest .....in size.

#### Write what the following statement indicate:

1- The seasonal migration of animals from one place to another are considered a behavioral adaptation. ( Migration

2- A behavior or any way acts by a living organism to survive. ( Behavioral adaptation

Put ( ☒ ) or ( ☐ ):

1- Lifestyles do not affect human growth. ☐



**Answer each of the following questions**

**First Question : - What happens when:**

1- Water falls on the earth?

It may flow as runoff and collect in streams, rivers, lakes, or oceans, where it can evaporate again, or it may sink into Earth.

2- Place a jar with hot water (blue color) on the top of a jar with cold water (red color) (relative to mixing colors)

The water does not move and the colors do not mix as no convection will occur.

**Choose the right answer:**

1- **b- Wind** ..... can be described as very fast.

a- Air density **b- Wind** c- Humidity d- Temperature

**Explain the meaning of each of the following:**

1- Anemometer:

A tool that records the speed of wind blowing.

**Read the following statements then correct the incorrect ones:**

1- Warm moist air is denser than cold one. **X** less dense

2- Water level in lakes is decreased due to increased evaporation. **✓**

**Second Question : - Complete the following sentences:**

1- The regions near the **equator** are very hot.

2- When air is heated up, it .... **rises** .....

3- A thermometer is used to measure .. **temperature** .....

**Choose the right answer:**

1- The Dorcas gazelle has. that helps it to live in the desert **(d) brown fur**

(a) white fur (b) thick feathers (c) flaky skin **(d) brown fur.**

**Read the following statements then correct the incorrect ones:**

1- The size of an organism is a characteristic that is not affected by genetic factors. **X** affected



2- The emperor penguin's body is covered with thick skin to overcome the low temperature.

X

Dense feather

### Third Question : -

#### Explain the scientific reason:

1. Snow falls on some places.

Because the air in the clouds is cold enough to allow ice crystals to form.

2. Although it is difficult meteorologists are able to make accurate predictions.

Because they collect as much data as they can about air temperature, air pressure, humidity, wind, and other conditions, and use tools, satellites, and complex computer models.

#### Answer the following questions:

1- Mention the three basic stages that meteorologists follow when studying weather conditions.

Gathering Data, Collecting Data, Analyzing the Data and putting it all together

2- Identify the importance of soil for humans and animals.

All our food supply depends on soil. Soil contains the food, air, and water that plants need to grow and also home for different organisms.

3- Determine the importance of soil to other organisms.

Soil is home to many different organisms, including worms, insects, fungi, and bacteria.

### Fourth Question : -

#### Complete the following sentences:

1- The process of moving rocks from one place to another is known as

erosion

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weathering

2- The two basic processes in soil formation are ..... and ..

erosion

#### Write what the following statement indicate:

1- The process by which a living organism becomes capable of living in an environment in a way that enables its survival.

adaptation

2- Information and characteristics that determine the traits of a living organism and are passed down from parents to offspring.

genes

#### Put ( √ ) or ( X ):

1- Climate change affects the breeding grounds of flamingos.

√



Answer each of the following questions

First Question : - What happens when:

1- The difference of air particles temperature (relative to convection currents

When air particles have different temperatures, hotter less dense particles rise and cooler denser particles sink, creating a convection current.

2- very dry wind blows over an area of the land.

The dry air lost all its water vapor, it dries the land so it will form deserts

Choose the right answer:

1- The state of the atmosphere over a short period of time is

c- climate

a- humidity      b- weather      c- climate      d- clouds

Explain the meaning of each of the following:

1- Weather Radar:

Radar detects precipitation and helps track thunderstorms and hurricanes.

Read the following statements then correct the incorrect ones:

1. Bodies of water lose heat slowly. ✓

2. Desert temperature are very high during the day and night. X

Day only

Seco The science of studying and predicting the weather.

Complete the following sentences:

1- One of the devices used to carry measuring instruments

satellites

airplanes

and ...

weather

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ورقة و قلم في الساعات

2- Using Weather map one of the most effective methods for analyzing collected data.

3- Mountain ranges often have two sides; one .... wet ... side facing the wind and the other. dry ... side facing away.

Choose the right answer:

1- Soil in the desert is characterized by fertility.

(a) high

(b) low

(c) medium

B) low

(d) neutral



### Answer the following questions:

1- Mention: the main steps of weather forecast

Gathering Data, Collecting Data, Analyzing the Data, Putting It All Together

### Third Question : -

#### Explain the scientific reason

1- Snowfall in some places

Snow forms when the air in the clouds is cold enough to allow ice crystals to form, when it collected together and become heavy it pull down by the effect of gravity

2- The spinning of the paper spirals over a turned-on lamp .

When air is heated by the lamp, it expands as its molecules spread out away from each other, and less dense warm air rises, causing the paper spiral to spin

1- Hums increases soil fertility.

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2- Water is one of the basic ingredients of soil.



Sandstorms greatly reduce visibility, carry debris and cause damage, build up dust on solar panels disrupting power, fill irrigation canals affecting water quality, disrupt plane travel and damage engines, and pose health risks if dust is inhaled or blows into eyes.

### Answer the following questions:

1- Mention: the negative effects of sand storm blow

2- How do genetic factors affect the growth of living organisms?

Genes determine traits that get passed down from parent to offspring.

### Fourth Question : -

#### Complete the following sentences:

1- Silt soil are . medium n size.

weathering and erosion are from the basic processes in soil formation

#### Write what the following statement indicate:

1- A plant grows faster when the period of the day is shorter than the night. Chrysanthemum

2- An organelle in the cell responsible for reproduction and building special information about the cell. nucleus

#### Put ( √ ) or ( X ):

1- Energy from the sun is distributed in the same quantity and manner across the Earth's surface. X

Science  
Dr/Michael Guirguis

ورقة و فلم في السانيس  
22



Model  
Exam

12

Dakahlia Governorate  
Educational Directorate

Science Primary Six  
2<sup>nd</sup> Term May 2026

Time : 1 1/2 Hours  
توجيه عام العلوم لغات

نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي  
(الإجابة في نفس الورقة / صفحة واحدة)

Answer each of the following questions

First Question : -

Correct the following statement:

1- Minerals and organic matter make up about a quarter of most soils.

X

half

Give reason:

1. Floods cause damage to buildings.

by causing water damage or by moving or breaking them. by causing water damage or by moving or breaking the buildings.

2. The oceans help in improving the world's climate.

ocean currents together transport heat through the wind which help in distribution of temperature.

3. The plants of the Western Desert in Egypt have thick stems and eaves.

A tool that to store water to help adaptation in arid conditions of deserts

1. Clay soils retain water well.

Because it has very small particles so spaces between particles (pores) is less so let it more retain for water

Second Question : -

Write down what the following statement indicates:

- Spaces in the soil between the molecules that are filled with air or water.

pore space

Sand particles are the largest, clay particles are the smallest, silt are particles that are in between the smallest and largest sizes.

Compare between

- Particles of sand, clay and silt in size.

- Flood and drought.

Flood: water flows over the edges of a riverbank and onto the land around the river when the increase in flow from rainfall is so rapid.

1- Berman cat and Pharaonic cat

Drought: occurs when there is a long period of dry weather during which there is not enough water to sustain people, plants, and animals.

Berman : long silky hair varying colors

Pharaonic: fine hair to hairless

1- Structural and behavioral adaptation

Structural adaptations are linked to the structure of an organism's body, such as thickness fur

Behavioral adaptations are anything that a living thing does or the way that an animal acts that promotes survival, such as a plant growing toward light



Complete the following statements:

1. Swamp soils are .... All the time.

wet

2. The rock building unit is

mineral

What happens when:

1. A predator enters to an environment.

It becomes invasive species and kill off native plants and animals and causes habitat destruction.

2. Increased light intensity relative to the plant.

It can damage plant parts and cause drying or burning.

3. Moist air collides with mountains.

Humid air encounters a mountain range air rises then cools water vapor condenses , precipitation occurs. Air descends, warms and dries the land and form rain shadow effect.

Fourth Question :-

Choose the correct answer:

1- The source of minerals in the soil is .....

b-rocks

a- humus

b- rocks

c- water

d- air

2- The adaptation of organisms to the environment leads

a- b. their

a- their extinction

b. their survival

c- decreasing their numbers

d- their migration

What are the consequences of:

1. Invasive organisms entering a natural habitat.

Invasive species can kill off native plants and animals and can even become the dominant population.

2. Soil drainage.

Sandy soils drain water quickly and large trees often do not grow in dry, loose soil While wetlands have slow drainage of water so it become wet for long time

3. Sudden melting of snow and ice in an area.

Flooding can be caused by the sudden melting of snow and ice over a region.

.....



**Model Exam**

Dakanila Governorate  
Educational Directorate

Science Primary Six  
2<sup>nd</sup> Term May 2026

Time : 1 1/2 Hours

توجيه عام العلوم لغات

نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي  
Dr Michael Guirguis ((الاجابة في نفس الورقة / صفحة واحدة))

ورقة و قلم في السانيس

13

**Answer each of the following questions**

**First Question : -**

**What happens when:**

1- Very dry wind blows over an area of the land

The dry air lost all its water vapor, it dries the land so it will form deserts

2- The difference of air particles temperature (relative to movement).

Hotter, less dense particles rise and cooler, denser particles sink so convection current will occur.

3- Rising higher in relation to atmospheric pressure and temperature.

The air pressure is lower and the temperature is lower.

ورقة و قلم في السانيس

**Choose the right answer:**

1- A ..... can write a report on the weather.

b- meteorologist

a- firefighter

b- meteorologist

c- astronaut

d- pilot

**Explain the meaning of each of the following:**

cold

11- Drought:

there is not enough water to sustain people, plants, and animals.

**Second Question : -**

**Complete the following sentences:**

low

1- One of the characteristics of desert soil it is a ..... fertility soil

2- Air pressure at the top of the mountain is ..... less ... than air pressure at the bottom of the mountain.

less

3- One of the difficulties that farmers face while farming in the deserts is .. more water evaporates than falls by precipitation

more water evaporates than falls by precipitation

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ورقة و قلم في السانيس

**Choose the right answer:**

1- All of the following are reasons for the birds and animals' migrations except (d) escaping from enemies.

(a) searching for food.

(b) reproduction and survival.

(c) new habitat.

(d) escaping from enemies.

**Read the following statements then correct the incorrect ones**

ورقة و قلم في السانيس



1. The rotation of a paper spiral above a lighted lamp shows the occurrence of heat convection current.
2. The barometer is used to determine atmospheric pressure.



### Third Question :-

Explain the scientific reason:

- 1- Air movement ( in the term of temperature)

..... dense particles rise and cooler, denser particles sink which is convection.

- 2- Decomposers are considered environmental cleaners?

Decomposers are environmental cleaners that break down dead organisms from plants and animals.

Answer the following questions:

- 1- Compare between sandy soils and clay soils in terms of particle size and cohesion:

| Type of soil | Size of particles | Cohesion |
|--------------|-------------------|----------|
| Sandy soil   | largest           | weak     |
| Clay soil    | smallest          | strong   |

Look at the corresponding shape, then choose:

- 1- This picture is for .....

(Pharaonic Cat - **Berman Cat**)

- 2- This cat has long, silky hair due to ..... factor.

(**genetic** - environmental)



### Fourth Question :-

Complete the following sentences:

- 1- ..... **Humus** ..... are the remains of organisms that have died and decayed.

- 2- It is available in the natural habitat **food** **water** and **shelter** essential resources for the survival of living organisms.

Write what the following statement indicate:

- 1- A type of soil characterized by its large sized particles and low water retention. ( **Sand soil** )

- 2- Spaces between soil particles filled with water or air. ( **pore space** )

Put ( √ ) or ( X ):

- 1- The rate of transpiration from plant leaves decreases in the morning. **√**



|                         |                                                                                                               |                               |                       |
|-------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------|
| <b>Model Exam</b><br>14 | Dakahlia Governorate                                                                                          | Science Primary Six           | Time : 1½ Hours       |
|                         | Educational Directorate                                                                                       | 2 <sup>nd</sup> Term May 2026 | توجيه عام العلوم لغات |
|                         | نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي<br>(الاجابة في نفس الورقة / صفحة واحدة) |                               |                       |

Answer each of the following questions

First Question : -

What happens when:

1- The air cools and water vapor condenses at the sky.

making clouds

2- The amount of water vapor in the air increases

Humidity increases.

3- A light bulb is placed 5cm from a container of sand and another container of the same volume of water (which heat us up faster)

The sand will gain thermal energy faster so it will heat up faster than water

Choose the right answer:

d- moderation of the weather

1- All of the following are damages caused by floods except .....

a- disruption of the economy

b- damage to buildings

c- drowning of livestock

d- moderation of the weather

Explain the meaning of each of the following:

1- Flood:

the increase in flow from rainfall is so rapid that the water flows over the edges of a riverbank and onto the land around the river.

Second Question : -

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ورقة و فلم في السبيل

Complete the following sentences:

1- One of the negative effects of drought is less water available for growing crops

2- One of the causes of floods is ..... and the sudden melting of snow .

High temperature

3- Weather map is used in the data analysis phase to represent and communicate data to the public.

Choose the right answer:

1- The traits that are passed down from parents to children are

(a) Genetic traits



|                  |                                                                                                               |                               |                       |
|------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------|
| Model Exam<br>14 | Dakahlia Governorate                                                                                          | Science Primary Six           | Time : 1½ Hours       |
|                  | Educational Directorate                                                                                       | 2 <sup>ND</sup> Term May 2026 | توجيه عام العلوم لغات |
|                  | نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي<br>(الاجابة في نفس الورقة / صفحة واحدة) |                               |                       |

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High temperature

3- Weather map is used in the data analysis phase to represent and communicate data to the public.

**Choose the right answer:**

1- The traits that are passed down from parents to children are

(a) Genetic traits



(a) genetic traits.

(b) acquired traits.

(c) environmental traits.

(d) adaptational traits.

Read the following statements then correct the incorrect ones:

1. Solar energy is distributed equally across the earth surface which lead to climate diversity. **X** **unequally**

2- Heavy rains cause the destruction of ecosystems. **✓**

Third Question : -

Ex Sandstorm Scientific reason:

1- The dangerous of flooding increases if the land is frozen

Because frozen land cannot absorb water in these conditions.

2- Over population may cause the destruction of natural habitats.

leads to less food, water, shelter, and space for other populations that live in the area, lead to unsustainability

Read the following statements then correct the incorrect ones:

1- One of the characteristics of sandy soils is its large sized particles and low water retention. **✓**

2- Climate does not affect soil properties. **X** **affects**

Choose the odd word:

1- Sand - humus - clay - silt.

**humus**

All are products of rock weathering except humus

2- Wide eye - plant height - swimming skill - skin color. ( ..... )

**swimming skill**

All are genetic traits except swimming skills

Fourth Question : -

Complete the following sentences:

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ورقة وقلم في السنين

**Restore depleted nutrients**

1- One of the advantages of using sustainable soil ..

**Improve soil health**

2- Natural factors that increase soil fertility

**decomposers**

Write what the following statement indicate:

1- The loose delicate layer of the earth.

**Soil**

2- It is a place where living organisms live and where water, food, and shelter are available.

**habitat**

Put ( ✓ ) or ( X ):

1- Water vapor gains energy during the condensation process. **X**



|                                                                                                                                                                                                    |                                                                                                                 |                               |                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------|
| <b>Model Exam</b><br> <b>15</b>  | Dakahlia Governorate                                                                                            | Science Primary Six           | Time : 1½ Hours       |
|                                                                                                                                                                                                    | Educational Directorate                                                                                         | 2 <sup>ND</sup> Term May 2026 | توجيه عام العلوم لغات |
|                                                                                                                                                                                                    | نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي<br>((الاجابة في نفس الورقة / صفحة واحدة)) |                               |                       |

### Answer each of the following questions

#### First Question : - What happens when:

1- Placing Spiral paper above unlighted lamp.

..... *It will be rotate (Spin)* .....

2- Sand and water at night after they exposed to sunlight at the day.

..... *Sand at night will be cool, but water become hot* .....

3- Sand and water at the day after they exposed to sunlight

..... *Sand at day will be very Hot But water be cooled* .....

#### Choose the right answer:

1- is considered the first step in the process of weather forecasting and understanding how it changes.

a- Data analysis

b- Connection between things

c- Data collection

d- Using maps

#### Explain the meaning of each of the following:

1- Sandstorms:

..... *It is strong blowing wind carrying sand grains* .....

#### Second Question : - Complete the following sentences:

1- Sandstorms occur in the *desert* ..... areas. (*Dry*)

2- One of the causes of drought is *Lack of Rainfall*, *Evaporation in Crease*

#### Write what the following statement indicate:

1- It is the depletion of one of the natural resources provided by the habitat or taking it completely. (*Soil depletion*)

2- Species of organisms that enter the ecosystem and cause disruption. (*invasive organisms*)

3- Organic components rich in nutrient produced by the decomposition of dead organisms. (*Humus*.....)



**Third Question : - Explain the scientific reason:**

- 1- Snow forms at the top of a mountain but it still liquid at the bottom of the same mountain *Be Cause temperature at top of mountain is low. But at bottom be High.*
- 2- Plants and animals depend on the soil. *Bec Plants take water and nutrients from soil and grow inside it and animal depend on plants in taking food.*
- Choose the right answer:**

1- All the following adaptations help plants that live in the desert to survive except .....

- (a) thick stems (b) short branched roots  
(c) sharp thorns (d) broad leaves

**Read the following statements then correct the incorrect ones:**

- 1- Drought is a rise in the water level above the riverbank. *Flood*
- 2- One of the negative effects of sandstorms is that dust fills the irrigation canals, affecting water quality.

**Choose the odd word:**

1- Air - water - decomposing organisms - rocks. (.....)

=====

**Fourth Question : - Complete the following sentences:**

- 1- One of the ways to preserve the soil *(make variety of planting crops)*
- 2- One of the factors that lead to the destruction of natural habitat by humans *over grazing*
- 3- When plants and animals are unable to adapt, they may face the risk of *extinction*

**Put ( √ ) or ( X ):**

1- Convection causes the movement of water through the water cycle in nature. (✓)

**Read the following statements then correct the incorrect ones:**

- 1- Removing vegetation keeps the soil from erosion. *Planting Plants*
- 2- The entry of invasive organisms into the natural habitat has a positive effect. *negative*
- =====



|                  |                                                                                                               |                               |                       |
|------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------|
| Model Exam<br>16 | Dakahlia Governorate                                                                                          | Science Primary Six           | Time : 1½ Hours       |
|                  | Educational Directorate                                                                                       | 2 <sup>ND</sup> Term May 2026 | توجيه عام العلوم لغات |
|                  | نموذج امتحان الفصل الدراسي الثاني / مايو 2026 / الصف السادس الابتدائي<br>(الإجابة في نفس الورقة / صفحة واحدة) |                               |                       |

### Answer each of the following questions

#### First Question : -What happens when:

1- The ice melts suddenly

..... Flooding will occur .....

2- Accumulation of dust over solar panels

..... It stop working. Don't generate electricity .....

3 - The weather is dry for a long time?

..... More Desert. will formed .....

#### Explain the meaning of each of the following:

1- Runoff: The step in which water flow along earth into river then Ocean or sea

#### Read the following statements then correct the incorrect ones:

1- One of the causes of drought is a severe drop in temperature. High

2- The process of condensation is the changing of hot water into water vapor. Evaporation

#### Second Question : - Complete the following sentences:

1- One of the causes of flooding is sudden melting of ice

2- One of the difficulties that faces farming in the deserts is lack of Rain fall

#### Write what the following statement indicate:

1- A natural area in which an interaction between biotic and abiotic factors occurs. ( E.C system )

2- Poorly aerated soil and it has small grains. ( clay soil )

3- The way an organism behaves that help to survive. behavioral adaptation

#### Third Question : - Explain the scientific reason:

1- Plants grow slowly in the windless area of the mountain

..... → Due to severe decrease in temperature .....

..... → No distribution of solar energy .....

..... → above mountain coldest region remain cold .....

Lack of sunlight



Bec: the type of soil is one of the factors that cause soil erosion

2- Adding sand and silt helps in the soil restoration.

Bec It Decrease Soil Erosion

Choose the odd word:

1- Sunlight - Precipitation - Temperature - Insects. (.....)

Answer the following questions:

1- Identify the picture of each animal then mention an example of a structural adaptation that enables it to survive in the environment in which it lives:



Figure (A): Arctic fox

Example of Structural Adaptation

Have white thick fur  
which keep its body warm



Figure (B): Emperor Penguin

which Have fatty layer  
to keep its body warm

Fourth Question :-

Complete the following sentences:

- 1- To reduce water pollution resulting from the overpopulation and industries.....
- 2- From the factors that lead to increasing soil erosion type of soil
- 3- Fertility can be restored to the soil by adding organic fertilizers

Put ( ✓ ) or ( X ):

1- Hot air is denser than cold air. ( X )

Choose the right answer:

- 1- Drought occurs as a result of ..
  - a- Moderation of temperature
  - b- High temperature
  - c- Low temperature
  - d- a and c together



### Test (1)

Answer the following questions :

1- Complete the following sentence:

Stream... or rivers lead to appearance of greater change.

2- Write the scientific term : A type of valley . Canyons

3- Give reasons: Rainwater downhill. → because the gravity pulls rain water downhill

4- What happens when: Rivers dry up. → Erosion stops

5- What are the similarities between, canyons and valleys?

### Test (2)

Answer the following questions :

1- Complete the following sentence:

Grand Canyon is a type of Valley... in North America.

2- Write the scientific term : Lowland areas found between mountains. → Valley

3- Give reasons: Canyon does not form quickly. → because erosion takes very long time

4- What happens when: The greater the water flow.

5- What are the differences between canyons and valleys? → the greater erosion & landform change.



# كيفية طباعة صفحات معينة من ملف معين

## مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

